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APPENDIX A

A Chronology of Business Cycles in the United States and Measures of Their Duration

BUSINESS cycles, according to the definition formulated by Burns and Mitchell,¹

are a type of fluctuation found in the aggregate economic activity of nations that organize their work mainly in business enterprises; a cycle consists of expansions occurring at about the same time in many economic activities, followed by similarly general recessions, contractions, and revivals which merge into the expansion phase of the next cycle; this sequence of changes is recurrent but not periodic; in duration business cycles vary from more than one year to ten or twelve years; they are not divisible into shorter cycles of similar character with amplitudes approximating their own.

The chronology shown in Table A.1 gives the dates of peaks and troughs in business cycles defined according to the above criteria, on a monthly, quarterly, and annual basis. Chapter 4 of *Measuring Business Cycles* gives an explanation of the method of deriving the dates and certain tests of their dependability, including comparisons with chronologies presented by other authors.

The dates are tentative and subject to revision. Indeed, several have recently been revised, as the note to the table indicates.² Further revision may shift dates by a month or two or three; some may be shifted six months or even more. For example, the peak in 1899 is probably predated several months, and there is considerable uncertainty about the cyclical turns just after the close of the Civil War. In general, the recent dates are more dependable than the early ones, the annual more dependable than the monthly dates, and the calendar year more reliable than the fiscal year dates. Note, however, that the annual and quarterly dates have been forced to correspond with the monthly dates (except in the period not covered by the latter), although the quarters and years are not necessarily the same as those in which the monthly turns occur. Independent dating on the basis of annual data alone would probably yield fewer cycles, since some brief and mild contractions might not appear in annual figures (but see *Measuring Business Cycles*, Chapter 6, especially pp. 261–262).

No single aggregate or index was relied upon to establish the

¹ *Measuring Business Cycles*, New York, National Bureau of Economic Research, 1946, p. 3.

² Since the reports reprinted in this book were prepared at various dates, some of them do not use the revised dates given in Table A.1, or do not use all the revisions.

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chronology. Rather, a number of such aggregates has been used, the list varying according to the availability of appropriate figures. Many of these aggregates are listed among the "roughly coincident" series in Appendix B, although other series were used as well, especially in the earlier years. The business cycle peak and trough dates represent, as nearly as possible, the consensus among the available data as to when an expansion in aggregate economic activity culminated and contraction began, and when contraction culminated and expansion began.

The durations of successive expansions and contractions and of cycles taken from trough to trough and from peak to peak, as determined from the monthly chronology, are shown in Table A.2.

TABLE A.1
Dates of Peaks and Troughs of Business Cycles in the United States, 1834-1958

<i>Monthly</i>				<i>Quarterly</i>		<i>Calendar Year</i>		<i>Fiscal Year^a</i>	
Trough		Peak		Trough	Peak	Trough	Peak	Trough	Peak
						1834	1836		
						1838	1839		
						1843	1845		
						1846	1847		
						1848	1853		
Dec. 1854	June 1857	IV 1854	II 1857			1855	1856		
Dec. 1858	Oct. 1860	IV 1858	III 1860			1858	1860		
June 1861	April 1865	III 1861	I 1865			1861	1864		
Dec. 1867	June 1869	I 1868	II 1869			1867	1869	1868	1869
Dec. 1870	Oct. 1873	IV 1870	III 1873			1870	1873	1871	1873
March 1879	March 1882	I 1879	I 1882			1878	1882	1878	1882
May 1885	March 1887	II 1885	II 1887			1885	1887	1885	1887
April 1888	July 1890	I 1888	III 1890			1888	1890	1888	1890
May 1891	Jan. 1893	II 1891	I 1893			1891	1892	1891	1893
June 1894	Dec. 1895	II 1894	IV 1895			1894	1895	1894	1896
June 1897	June 1899	II 1897	III 1899			1896	1899	1897	1900
Dec. 1900	Sep. 1902	IV 1900	IV 1902			1900	1903	1901	1903
Aug. 1904	May 1907	III 1904	II 1907			1904	1907	1904	1907
June 1908	Jan. 1910	II 1908	I 1910			1908	1910	1908	1910
Jan. 1912	Jan. 1913	IV 1911	I 1913			1911	1913	1911	1913
Dec. 1914	Aug. 1918	IV 1914	III 1918			1914	1918	1915	1918
March 1919 ^b	Jan. 1920	I 1919 ^b	I 1920			1919	1920	1919	1920
July 1921 ^b	May 1923	III 1921	II 1923			1921	1923	1922	1923
July 1924	Oct. 1926	III 1924	III 1926			1924	1926	1924	1927
Nov. 1927 ^b	Aug. 1929 ^b	IV 1927	III 1929 ^b			1927	1929	1928	1929
March 1933	May 1937	I 1933	II 1937			1932	1937	1933	1937
June 1938 ^b	Feb. 1945	II 1938	I 1945			1938	1944	1939	1945
Oct. 1945	Nov. 1948	IV 1945	IV 1948			1946	1948	1946	1948
Oct. 1949	July 1953	IV 1949	II 1953			1949	1953	1950	1953
Aug. 1954	July 1957	III 1954	III 1957			1954	1957	1954	1957
April 1958		II 1958				1958		1958	

SOURCE: Burns and Mitchell, *Measuring Business Cycles*, Table 16, except for revisions noted and dates since 1938.

^a Years ending June 30.

^b Revised. The unrevised dates were: April 1919 and II 1919, September 1921, December 1927, June 1929 and II 1929, and May 1938.

CHRONOLOGY AND MEASURES OF DURATION OF BUSINESS CYCLES

TABLE A.2

Duration of Business Cycle Expansions and Contractions in the United States,
1854-1958

				DURATION OF			
				<i>Cycle</i>			
<i>Business Cycle</i>		Peak		Expansion	Contraction ^a (months)	Trough to Trough	Peak to Peak
Trough							
December 1854	June 1857			30	18	48	40
December 1858	October 1860			22	8	30	54
June 1861	April 1865			46	32	78	50
December 1867	June 1869			18	18	36	52
December 1870	October 1873			34	65	99	101
March 1879	March 1882			36	38	74	60
May 1885	March 1887			22	13	35	40
April 1888	July 1890			27	10	37	30
May 1891	January 1893			20	17	37	35
June 1894	December 1895			18	18	36	42
June 1897	June 1899			24	18	42	39
December 1900	September 1902			21	23	44	56
August 1904	May 1907			33	13	46	32
June 1908	January 1910			19	24	43	36
January 1912	January 1913			12	23	35	67
December 1914	August 1918			44	7	51	17
March 1919	January 1920			10	18	28	40
July 1921	May 1923			22	14	36	41
July 1924	October 1926			27	13	40	34
November 1927	August 1929			21	43	64	93
March 1933	May 1937			50	13	63	93
June 1938	February 1945			80	8	88	45
October 1945	November 1948			37	11	48	56
October 1949	July 1953			45	13	58	48
August 1954	July 1957			35	9	44	
April 1958							
Averages							
25 cycles, 1854-1958				30	19	50	50 ^b
9 cycles, 1919-58				36	16	52	56 ^c
3 cycles, 1945-58				39	11	50	52 ^d

^a From peak on same line to trough on next line.

^b 24 cycles, 1857-1957.

^c 8 cycles, 1920-57.

^d 2 cycles, 1948-57.

APPENDIX B

Leads and Lags of Cyclical Indicators

THE twenty-six indicators listed in Table B.1 (on line numbers ending in 0) represent a revision of the list of twenty-one selected in 1950 (see Chapter 7, Table 7.11). The additions and substitutions have been made in the light of more recent information, as explained in Chapter 3. Table B.2 includes the remaining indicators from the 1950 list, together with a number of others that supplement in various ways those in Table B.1 and have a good record of performance. Related series are numbered to correspond in the two tables. For brief descriptions of the series, sources of current and historical data, and the original and seasonally adjusted figures and seasonal indexes, see Volume II.

The entries in Tables B.1 and B.2 are the number of months by which each specific cycle peak or trough in the indicator leads or lags behind the corresponding business cycle peak or trough. For quarterly series, the intervals are from the midmonth of the specific peak or trough quarter to the business cycle peak or trough month. For an explanation of the procedures used in identifying specific cycle turns and matching them with business cycle turns, see Arthur F. Burns and Wesley C. Mitchell, *Measuring Business Cycles* (New York, NBER, 1946), pp. 56-66 and 116-128.

With certain qualifications the entries in Tables B.1 and B.2 may be used to derive the leads and lags of each indicator with respect to any other. For example, since the average workweek (series 1.0) led the July 1957 business cycle peak by twenty months and the industrial production index (series 15.0) led this peak by four months, the workweek led industrial production by sixteen months. The qualifications stem from the fact that unless the specific cycles in both indicators that are being compared are in one-to-one correspondence with business cycles, certain specific turns that are not matched with business cycles (and hence not recorded in the table) might appropriately be matched with each other. Furthermore, the median leads or lags will not be comparable unless the business cycles covered by each indicator are the same.

LEADS AND LAGS OF CYCLICAL INDICATORS

TABLE B.1

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TABLE B.1 (continued)

Indicator	Period Covered by Data	A. PEAKS															
		Lead (-) or Lag (+) at Business Cycle Peaks (in months)															
		Oct. 1873	Mar. 1887	Mar. 1890	Jul. 1893	Jan. 1895	Dec. 1899	Jun. 1902	Sep. 1907	Jan. 1910	Aug. 1913	Jan. 1918	May 1920	Oct. 1923	May 1926	Feb. 1937	Jul. 1948
9.0* Corporate profits after taxes, OBE (Q)	1939-59															-12	-6 -2 -20
9.1 Corporate profits after taxes, Barger (Q)	1920-38													0	-2	0	-6
10.0 Common stock price index, indus., rails and util., Standard and Poor's	1871-1959	-17	-9	+2	-2	-5	-3	-2	0	-8	-1	-4	-21	-6	-2	+1	-3 -5 -6 -12
11.0 Change in bus. inventories, OBE (Q)	1939-59																-15 -3 -26 -20
12.0 Indus. raw materials spot market price index, BLS	1935-59															-2	-10 -29 -19
12.1 Indus. raw materials spot market price index, Mack	1919-57													+3	-2	-11 -5 -1	0 -27 -15
13.0* Roughly Coincident Indicators																	
13.0* Employment in nonagr. establish., BLS	1929-59														0	+2	-20 0 -1 0
13.1 Factory employment index, BLS	1914-59													-19	0	+1 -9 0	+2 -15 -10 -2 -19
13.2 Factory employment index, Jerome	1889-1923													+1	-1	0 -2	
14.0 Unemployment rate, BLS (inv.)	1940-59																-4 -10 -2 -4
14.1 Unemployment rate, NICB (inv.)	1929-42															+2	
15.0* Total indus. produc. index (incl. utilities), FRB	1919-59																
15.1 Index of physical volume of bus. activity, Babson	1889-1957																
16.0* GNP, in current \$, OBE (Q)	1939-59																
16.1 GNP, in current \$, Barger and Klein (Q)	1921-41															0	+3
17.0 GNP, in constant \$, OBE (Q)	1947-59																0 -2 +1

LEADS AND LAGS OF CYCLICAL INDICATORS

TABLE B.1 (continued)

Indicator	Period Covered by Data	A. PEAKS															
		<i>Lead (-) or Lag (+) at Business Cycle Peaks (in months)</i>															
		Oct. 1873	Mar. 1882	Mar. 1887	July 1890	Jan. 1893	Dec. 1895	June 1899	1902	May 1907	1910	Jan. 1913	Aug. 1918	Jan. 1920	May 1923	Oct. 1929	Aug. 1937
18.0* Bank debits outside NYC, FRB	1919-59																
18.1 Bank clearings outside NYC, C & FC	1875-1959																
		-7	+3	+2	+1	-2	+3	+10	+5	+2	+9	+6	0	0	-2	-3	+1
19.0* Personal income, OBE	1929-59																
19.1 Personal income, Barger and Klein (Q)	1921-41																
20.0* Sales by retail stores, Census	1935-59																
20.1 Department store sales, FRB	1919-59																
21.0* Wholesale price index, excl. farm prod. and foods, BLS	1913-59																
22.0 <i>Lagging Indicators</i>																	
22.0 Plant & equip. expenditures, total, OBE-SEC (Q)	1947-59																
22.1 Plant & equip. expenditures, mfg., Chawner (Q)	1915-40																
23.0 Wage & salary cost per unit of output, mfg. (from OBE and FRB data)	1946-59																
23.1 Product. worker wage cost per unit of output, mfg. (from BLS and FRB data)	1919-59																
24.0* Mfrs. inventories, book value, Census-OBE (end of month)	1926-59																
25.0* Consumer installment debt, FRB (end of month)	1929-59																
26.0* Bank interest rates on bus. loans, FRB (last month of Q)	1939-59																
26.1 Bank interest rates on customers' loans, Riefler	1919-59																

TABLE B.1 (continued)

Indicator	Period Covered by Data	B. TROUGHS																					
		Lead (-) or Lag (+) at Business Cycle Troughs (in months)																					
		Dec. 1870	Mar. 1879	May 1885	Apr. 1888	May 1891	June 1894	Dec. 1897	June 1900	1904	1908	1912	Jan. 1914	Dec. 1919	May 1921	Nov. 1927	Mar. 1933	June 1938	Oct. 1945	Oct. 1949	Aug. 1954	Apr. 1958	
<i>Leading Indicators</i>																							
1.0* Average workweek, mfg., BLS	1932-59																	-6		-4	-4		
1.1 Average workweek, mfg., NCB	1920-48														-5	0	+5	-8	-5	+4			
2.0 Gross accession rate, mfg., BLS	1919-59																						
3.0 Layoff rate, mfg., BLS (inv.)	1919-59														-1	0	0	-3	-28	-7	-6	-4	-2
4.0* New orders, durable goods mfg. indus., value, Census-OBE	1939-59																						
4.1 New orders, durable goods mfg. indus., value, NCB	1929-44														-7	-1	-10	-11	-6	-2	-5	-4	-3
4.2 New orders, durable goods mfg. indus., physical volume, NBER (from Dept. of Commerce data)	1920-33																			-2	-3	-8	-2
5.0 Housing starts, no. of new dwelling units, Census	1939-59																						
5.1* Residential build. contracts, fl. sp., Dodge	1919-59														-6	-2		-4					
5.2 Residential build. contracts, value, Dodge	1915-56														-4	-7	0	-6	-3	-6	-9	-2	
6.0* Commer. and indus. build. contracts, fl. sp., Dodge	1919-59														-4	-7	0	-6	0	-6	-9		
7.0 Net change in no. of operating bus., OBE (Q)	1945-59														-1	-4	0	-2	-5	+3	-2	+2	
7.1* No. of new incorpor., 48 states, Dun and Bradstreet	1945-59																				-2	-6	-2
7.2 No. of new incorpor., 4 states, Corporation Trust Co.	1936-49																				-8	-5	
7.3 No. of new incorpor., 4-11 states, Evans ^b	1860-1941	-8	-6	-6	-4	-2	-8	-9	-10	-4	-6	-18	0	-4	-6	-1	-11	+21	+15		-9		

LEADS AND LAGS OF CYCLICAL INDICATORS

TABLE B.1 (continued)

B. TROUGHS																									
Indicator	Period Covered by Data	Lead (-) or Lag (+) at Business Cycle Troughs (in months)																							
		Dec. 1870	Mar. 1879	May. 1885	Apr. 1888	May. 1891	June 1894	June 1897	Dec. 1899	1900	1904	1908	Jan. 1912	Dec. 1914	1919	1921	1924	July 1927	Nov. 1929	Mar. 1933	June 1938	Oct. 1943	Aug. 1949	Apr. 1954	Apr. 1958
8.0* Bus. failures, liabil., indus. and comm., Dun and Bradstreet (inv.)	1875-1959	-13	-12	-8	-8	-6	-13	-9	-7	-13	-6	-6		+7	-9	-7	-8	-3		-6	-5	0			
9.0* Corporate profits after taxes, OBE (Q)	1939-49																								
9.1 Corporate profits after taxes, Barger (Q)	1920-38													-2	+1	0	-7	-1		+1	-5	-9	-2		
10.0 Common stock price index, indus., rails, and util., Standard and Poor's	1871-1959	-21	-4	+2	-5	+9	-10	-3	-10	-7	-18	0	-15	+1	-9		-9	-2		-4	-11	-4			
11.0 Change in bus. inventories, OBE (Q)	1939-59																			-11	+1	-9	-2		
12.0 Indus. raw materials spot market price index, BLS	1935-59																			0	-4	-6	+1		
12.1 Indus. raw materials spot market price index, Mack	1919-57											0	0	-1	+9	-8	0	0		-3	-6				
<i>Roughly Coincident Indicators</i>																									
13.0* Employment in nonagr. establish., BLS	1929-59																			0	0	-1	0		
13.1 Factory employ. index, BLS	1914-59											0	0	0	0	+2	-8	0	+4	0	0	+1			
13.2 Factory employ. index, Jerome	1889-1923											+1	0	-6											
14.0 Unemployment rate, BLS (inv.)	1940-59																								
14.1 Unemployment rate, NICB (inv.)	1929-42																			+5	0	+1	+4		
15.0* Total indus. produc. index (incl. utilities), FRB	1919-59																								
15.1 Index of physical volume of bus. activity, Babson	1889-1957																								
16.0* GNP, in current \$, OBE (Q)	1939-59																								
16.1 GNP, in current \$, Barger and Klein (Q)	1921-41																								

APPENDIX B

TABLE B.1 (continued)

B. TROUGHS																							
		Lead (-) or Lag (+) at Business Cycle Troughs (in months)																					
		Dec. 1870	Mar. 1879	May 1885	Apr. 1888	May 1891	June 1894	June 1897	Dec. 1900	Aug. 1904	June 1908	Dec. 1914	Mar. 1919	July 1921	Nov. 1924	Mar. 1927	June 1929	Oct. 1933	Apr. 1938	Oct. 1945	Aug. 1949	Apr. 1954	Apr. 1958
Indicator	Period Covered by Data																						
17.0	GNP, in constant \$, OBE (Q)	1947-59																					
18.0*	Bank debits outside NYC, FRB	1919-59																					
18.1	Bank clearings outside NYC, C & FC	1875-1959	-10	-3	-6	-2	-10	-10	-3	-3	-6	-9	-1	+6	-1	-10	0	-1	+1	-1	-2	-3	-2
19.0*	Personal income, OBE	1929-59																					
19.1	Personal income, Barger and Klein (Q)	1921-41																					
20.0*	Sales by retail stores, Census	1935-59																					
20.1	Department store sales, FRB	1919-59																					
21.0*	Wholesale price index, excl. farm prod. and foods, BLS	1913-59																					
<i>Lagging Indicators</i>																							
22.0	Plant & equip. expenditures, total, OBE-SEC (Q)	1947-59																					
22.1	Plant & equip. expenditures, mfg., Chawner (Q)	1915-40																					
23.0	Wage & salary cost per unit of output, mfg. (from OBE and FRB data)	1946-59																					
23.1	Produc. worker wage cost per unit of output, mfg. (from BLS and FRB data)	1919-59																					
24.0*	Mfrs. inventories, book value, Census-OBE (end of month)	1926-59																					
25.0*	Consumer instalment debt, FRB (end of month)	1929-59																					
26.0*	Bank interest rates on bus. loans, FRB (last month of Q)	1939-59																					
26.1	Bank interest rates on customers' loans, Riefler	1919-39																					

LEADS AND LAGS OF CYCLICAL INDICATORS

TABLE B.1 (continued)

C. SUMMARY Number of														
Indicator	Peaks or Troughs	Business Cycle Turns Skipped	Extra Specific Turns	Leads		Coincidence Exact	Lags		Median Lead (-) or Lag (+)	Mean Lead (-) or Lag (+)	Stand. Dev. of Leads and Lags (months)	Longest Lead	Lag	
				1-3 Mos.	4 Mos. or More		1-3 Mos.	4 Mos. or More						
<i>Leading Indicators</i>														
1. Average workweek, mfg.	Peaks Troughs	1 1	1 1	5 5	1 1	0 2	2 2	1 0	-7 -4	-7.4 -2.8	6.5 3.9	-20 -8	+2 +5	
2. Gross accession rate, mfg.	Peaks Troughs	0 1	1 5	7 5	2 3	0 2	2 5	0 0	-10 -3.5	-15.1 -5.7	12.1 7.8	-35 -28	-3 0	
3. Layoff rate, mfg. (inv.)	Peaks Troughs	0 1	2 2	6 6	3 3	0 0	3 3	0 0	-8 -5	-10.7 -5.4	9.0 3.2	-27 -11	-1 -1	
4. New orders, durable goods indus.	Peaks Troughs	2 1	1 1	7 2	0 5	0 1	0 6	0 0	-6 -2	-10.6 -3.1	10.2 2.4	-35 -8	-4 0	
5. Housing starts, 1939-59; residential build. contracts, 1915-38	Peaks Troughs	2 2	3 3	6 5	1 2	0 1	1 3	0 0	-13.5 -5	-12.2 -4.5	11.2 2.5	-31 -8	+8 0	
6. Commer. and indus. build. contracts	Peaks Troughs	2 2	2 2	5 2	1 3	0 1	2 6	1 2	-9 -1.5	-10.9 -1.1	10.4 2.6	-32 -5	+2 +3	
7. Net change in no. of operating bus. (Q), 1945-59; new incorporations, 1860-1944	Peaks Troughs	4 2	7 6	10 14	5 4	1 1	8 6	2 2	-3 -3	-5.4 -3.5	9.8 8.0	-33 -18	+15 +21	
8. Bus. failures, liabilities (inv.)	Peaks Troughs	3 3	1 1	14 15	0 1	1 1	3 2	0 1	-7 -6.9	-11.5 -6.9	10.0 4.8	-28 -13	+3 +7	
9. Corporate profits after taxes (Q)	Peaks Troughs	1 0	2 2	4 3	2 3	2 1	4 6	0 2	-4 -2	-6.0 -2.7	6.5 3.4	-20 -9	0 +1	
10. Common stock price index	Peaks Troughs	2 2	3 3	10 13	6 2	1 1	9 5	2 2	-4 -5	-5.4 -6.3	5.8 7.0	-21 -21	+2 +9	
11. Change in bus. inventories (Q)	Peaks Troughs	0 0	2 2	3 2	1 1	0 0	1 2	0 1	-17.5 -5.5	-16.0 -5.2	8.5 4.9	-26 -11	-3 +1	
12. Indus. raw materials spot market price index	Peaks Troughs	1 1	1 1	5 3	2 1	0 3	3 5	1 1	-7.5 0	-9.4 -1.0	9.8 4.6	-29 -8	+3 +9	
<i>Roughly Coincident Indicators</i>														
13. Employment in nonagr. establish., 1929-59; factory employment, 1889-1928	Peaks Troughs	2 2	0 0	4 4	1 2	4 9	10 12	5 1	0 0	-1.6 -2.0	7.9 3.5	-20 -10	+10 +2	
14. Unemployment rate (inv.)	Peaks Troughs	0 0	0 0	3 0	1 0	0 2	2 4	2 2	-4 +1.5	-3.6 +2.0	3.9 1.9	-10 0	+2 +5	
15. Indus. production, 1919-59; bus. activity, 1889-1918	Peaks Troughs	1 1	0 0	4 6	2 4	4 6	10 10	4 0	0 -1	-1.1 -2.9	6.7 4.3	-15 -12	+10 +4	

TABLE B.1 (concluded)

C. SUMMARY Number of												
Indicator	Peaks or Troughs	Business Cycle Turns Skipped	Extra Cycle Turns	Leads		Coincidences		Lags		Median Lead (-) or Lag (+)	Mean Lead (-) or Lag (+)	Stand. Dev. of Leads and Lags (months)
				4 Mos. More	1-3 Mos.	Exact	Roughd	1-3 Mos.	4 Mos. More			
16. GNP, in current \$ (Q)	Peaks Troughs	2 0	0 0	0 1	1 4	2 0	6 5	3 1	0 1	+0.5 -1	+0.8 -1.0	1.8 2.7
17. GNP, in constant \$ (Q)	Peaks Troughs	0 0	0 0	0 1	1 2	1 0	3 2	1 0	0 0	0 -3	-0.3 -3.3	1.2 1.2
18. Bank debits outside NYC, 1919-59; clearings, 1875-1918	Peaks Troughs	4 4	1 0	1 6	3 9	2 1	11 11	6 1	4 0	+1.5 -3	+1.8 -4.0	4.2 3.6
19. Personal income	Peaks Troughs	0 0	0 0	1 2	1 5	1 2	5 7	3 0	2 0	+1 -2	+1.4 -2.8	3.9 3.6
20. Sales by retail stores, 1935-59; department store sales, 1919-34	Peaks Troughs	2 3	0 0	0 1	0 2	2 1	3 5	1 2	3 0	+2.5 -0.5	+3.3 -0.7	3.3 3.2
21. Wholesale price index, excl. farm prod. and foods	Peaks Troughs	5 4	1 1	1 0	2 0	0 1	4 6	2 5	1 1	0 +1	-1.3 +2.1	6.7 2.2
<i>Lagging Indicators</i>												
22. Plant & equip. expenditures, total, 1947-59; manufacturing, 1915-40	Peaks Troughs	0 0	0 0	0 0	1 1	3 1	8 6	4 4	1 3	+1 +2	+0.8 +2.1	1.9 2.1
23. Wage and salary cost per unit of output, milg., 1946-59; wage cost, 1919-45	Peaks Troughs	3 4	1 1	0 0	0 0	0 0	1 1	0 1	6 5	+6.5 +7	+7.0 +9.2	1.9 7.1
24. Manufacturers' inventories	Peaks Troughs	0 0	0 1	2 0	0 0	0 0	2 2	2 4	3 4	+1.5 +3.5	+0.8 +3.4	5.2 5.8
25. Consumer installment debt	Peaks Troughs	2 2	2 0	0 1	0 1	0 0	2 2	1 1	3 2	+5.5 +3.5	+5.2 +2.8	1.9 2.7
26. Bank interest rates on business loans	Peaks Troughs	1 1	1 1	1 0	0 0	1 0	2 3	1 3	5 6	+5 +5	+2.1 +9.7	9.1 11.1

NOTE: The current indicator is listed on top line. (numbers ending in 0), the related historical indicator on next line (or lines). Leads and lags are entered for the historical indicators for entire period they cover (except as noted), but the summary is based on the entries for current indicators as far back as they go together with the entries for historical indicators for earlier cycles.

* Included in the 1950 list of 21 indicators. For others on that list, see Table B.2. In the 1950 list, corporate profit was classified as roughly coincident instead of leading, and personal income and retail sales as lagging instead of roughly coincident.

a One additional timing observation—a lead of two months at the April 1965 business cycle peak—is included in the summary.

b One additional timing observation—a lag of one month at the June 1961 business cycle trough—is included in the summary.

c Leads of three months at the peak and at the trough are not included because the decline from August 1948 to July 1949 is too mild to be considered a specific cycle contraction.

d Includes leads of 1-3 months, exact coincidences, and lags of 1-3 months.

LEADS AND LAGS OF CYCLICAL INDICATORS

TABLE B.2
Leads and Lags of Selected Additional Indicators at Business Cycle Peaks and Troughs since 1870

		A. PEAKS																						
		Lead (-) or Lag (+) at Business Cycle Peaks (in months)																						
Indicator	Period Covered by Data	Oct. 1873	Mar. 1882	Mar. 1887	July 1890	Jan. 1893	Dec. 1895	June 1899	1902	1907	1910	Jan. 1913	Aug. 1918	Jan. 1920	May 1923	Oct. 1926	Aug. 1929	May 1937	Feb. 1945	Nov. 1948	July 1953	July 1957		
<i>Leading Indicators</i>																								
3.1 No. of persons on temporary layoff, BLS (inv.)	1947-59																				-35	-13		
3.2 No. of initial claims for unemployment insur., BES (inv.)	1946-59																				-11	-10	-22	
6.1 New orders for producers' durable equip., value, Census-OBE	1949-59																				-30	-5		
6.2 New orders and contracts for plant & equip., value, Census-OBE & Dodge ^a	1949-59																				-26	-5		
6.3 New capital appropriations, mfg. cos., NICB (Q)	1953-59																				+1	-17		
8.1 No. of "large" bus. failures, comm. and indus., Dun and Bradstreet (inv.)	1948-59																				-5	-35	-33	
8.2 No. of "large" bus. failures, mfg. cos., Dun and Bradstreet (inv.)	1894-1959	-5	-1	-1	-16	-11	-3	-29	0	-6	-12	+2	0	+2	0	+2	0	-3	-3	-8	-11	-21	-2	-20
9.2 Percentage of companies with profits, First National City Bank (Q)	1920-38, 1946-58														0	-2	0	-3						
9.3 Profits (before taxes) per dollar of sales, mfg., FTC-SEC (Q)	1947-59																							
10.1* Indus. stock price index, Dow-Jones	1897-1959																							
12.2* Wholesale price index, 22 basic commodities, BLS	1946-59																							

APPENDIX B

TABLE B.2 (continued)

[illegible]

LEADS AND LAGS OF CYCLICAL INDICATORS

TABLE B.2 (continued)

Indicator	Period Covered by Data	B. TROUGHS																		
		Dec. 1870	Mar. 1879	May 1885	Apr. 1888	May 1891	June 1894	Dec. 1900	Aug. 1904	June 1908	Jan. 1912	Dec. 1914	July 1919	Nov. 1921	July 1924	Nov. 1927	Mar. 1933	June 1938	Oct. 1945	Apr. 1954
<i>Leading Indicators</i>																				
3.1	No. of persons on temporary layoff, BLS (inv.)	1947-59																	0	-9
3.2	No. of initial claims for unemployment, insur., BES (inv.)	1946-59																	-2	+1
6.1	New orders for producers' durable equip., value, Census-OBE	1949-59																	-5	-7
6.2	New orders and contracts for plant & equip., value, Census-OBE & Dodge ^a	1949-59																	-5	-5
6.3	New capital appropriations, mfg. cos., NICB (Q)	1953-59																	-6	+1
8.1	No. of "large" bus. failures, comm. and indus., Dun and Bradstreet (inv.)	1948-59																	-2	-10
8.2	No. of "large" bus. failures, mfg. cos., Dun and Bradstreet (inv.)	1894-1959																	-2	-8
9.2	Percentage of companies with profits, First National City Bank (Q)	1920-38, 1946-58																	-5	-6
9.3	Profits (before taxes), per dollar of sales, mfg., FTC-SEC (Q)	1947-59																	-5	-9
10.1*	Indus. stock price index, Dow-Jones	1897-1959																	-4	-11
12.2*	Wholesale price index, 22 basic commodities, BLS	1946-59																	-4	-5

APPENDIX B

TABLE B.2 (continued)

Indicator	Period Covered by Data	B. TROUGHS																											
		Lead (-) or Lag (+) at Business Cycle Troughs (in months)																											
		Dec. 1870	Mar. 1879	May 1885	Apr. 1888	May 1891	June 1894	Dec. 1897	1899	1900	Dec. 1904	Jan. 1908	Mar. 1912	July 1914	July 1919	Nov. 1921	Jan. 1924	Mar. 1927	June 1933	Oct. 1938	Aug. 1945	Apr. 1949	1954	1958					
12.3 Wholesale price index, 28 basic commodities, BLS	1935-52																		+14						-4				
12.4 Wholesale price index, Bradstreet's	1892-1937																		-11.5	+5	-1	0	-9	-7	0	-1	-1	-5	-1
13.3 Nonagric. employment, labor force survey, BLS	1940-59																												
14.2* Total unemployment, BLS (inv.)	1940-59																												
14.3 Total unemployment, NICB (inv.)	1929-44																												
14.4 Insured unemployment, all programs, BES (inv.)	1945-59																												
14.5 Help-wanted advertising in newspapers, Metropolitan Life Insur. Co.	1919-59																												
15.2* Freight carloadings, AAR	1918-59																												
19.2 Labor income in mining, mfg., and construc., OBE	1929-59																												
20.2 Sales by retail stores, excl. food stores, Census	1935-59																												
23.2 Least cost per dollar of real GNP (from OBE data) (Q)	1947-59																												
24.1 Mfrs. finished goods inventories, book value, Census-OBE (end of month)	1939-59																												

LEADS AND LAGS OF CYCLICAL INDICATORS

TABLE B.2 (continued)

C. SUMMARY															
Number of															
Indicator	Peaks or Troughs	Business Cycle Turns Skipped	Extra Specific Cycle Turns	Leads			Coincidences			Lags		Median Lead (-) or Lag (+)	Stand. Dev. of Lead (-) and Lag (+) (months)	Longest Lead Lag	
				4 Mos. More	1-3 Mos.	Exact	1-3 Mos.	Rough ^b	1-3 Mos.	4 Mos. More					
<i>Leading Indicators</i>															
3.1 No. of persons on temporary layoff (inv.)	Peaks	1	0	2	0	0	0	0	0	0	-24	-24.0	11.0	-35	-13
	Troughs	0	0	1	1	1	1	2	0	0	-1	-3.3	4.0	-9	0
3.2 No. of initial claims for unemploy. insur. (inv.)	Peaks	0	1	3	0	0	0	0	0	0	-11	-14.3	5.4	-22	-10
	Troughs	0	1	0	2	0	0	3	1	0	-1	-0.7	1.2	-2	+1
6.1 New orders for prod. dur. equipment	Peaks	0	0	2	0	0	0	0	0	0	-17.5	-17.5	12.5	-30	-5
	Troughs	0	0	2	1	0	1	0	0	0	-5	-4.7	2.1	-7	-2
6.2 New orders and contracts for plant & equip.	Peaks	0	0	2	0	0	0	0	0	0	-15.5	-15.5	10.5	-26	-5
	Troughs	0	0	2	1	0	1	0	0	0	-5	-4.0	1.4	-5	-2
6.3 New capital appropriations (Q)	Peaks	0	0	1	0	0	1	1	1	0	-8	-8.0	9.0	-17	+1
	Troughs	0	0	1	0	0	1	1	1	0	-2.5	-2.5	3.5	-6	+1
8.1 } No. of large bus. failures (inv.)	Peaks	0	1	9	3	2	7	2	2	0	-5	-9.6	12.0	-35	+2
8.2 } Troughs	Troughs	1	1	10	3	1	3	1	3	3	-7.5	-4.8	11.0	-17	+28
9.2 Percentage of companies with profits (Q)	Peaks	0	1	2	3	2	5	0	0	0	-3	-3.9	3.8	-11	0
	Troughs	0	1	2	4	1	6	1	0	0	-1.5	-2.0	2.2	-6	+1
9.3 Profits (before taxes) per dollar of sales, mfg. (Q)	Peaks	0	1	2	1	0	1	0	0	0	-20	-14.3	8.7	-21	-2
	Troughs	0	1	2	1	0	1	0	0	0	-5	-5.3	2.9	-9	-2
10.1 Indus. stock prices, Dow-Jones	Peaks	2	2	6	4	1	7	2	2	0	-3	-7.5	9.5	-30	+3
	Troughs	3	2	9	2	1	4	1	0	0	-7	-7.0	5.4	-18	+1
12.2 } Wholesale price index, basic	Peaks	4	0	4	6	0	7	1	2	2	-2	-5.0	9.8	-29	+8
12.3 } commodities	Troughs	3	0	6	4	2	6	0	0	2	-1	-1.9	6.0	-11.5	+14
12.4 }															

TABLE B.2 (concluded)

Indicator	Peaks or Troughs	C. SUMMARY Number of											Stand. Dev. of Leads and Lags (months)	Longest Lead Lag
		Business Cycle Turns Skipped	Extra Specific Cycle Turns	Leads		Coincidences or Exact	Lags		Median Lead (-) or Lag (+)	Mean Lead (-) or Lag (+)				
				4 Mos. or More	1-3 Mos.		1-3 Mos.	4 Mos. or More						
<i>Roughly Coincident Indicators</i>														
13.3 Nonagric. employment, labor force survey	Peaks Troughs	0 0	0 0	3 0	0 3	0 1	1 4	1 0	-4 -1	-7.8 -1.2	10.3 1.1	-25 -3	+2 0	
14.2 } Total unemployment (inv.)	Peaks Troughs	1 0	0 0	3 0	0 0	0 2	2 4	2 2	-4 +1.5	-3.0 +3.5	4.3 4.9	-10 0	+2 +14	
14.4 } Insured unemployment (inv.)	Peaks Troughs	0 0	1 0	2 0	1 0	0 1	2 1	0 2	-4 +2.5	-8.7 +3.0	8.1 2.7	-20 0	-2 +7	
14.5 Help-wanted advertising in newspapers	Peaks Troughs	1 1	0 0	4 0	0 1	2 5	3 9	1 3	-2 0	-3.4 +0.2	6.3 1.0	-17 -2	+5 +2	
15.2 Freight carloadings	Peaks Troughs	0 0	0 0	5 1	2 1	2 3	5 8	1 2	-3 0	-8.6 0	10.4 3.4	-31 -8	+1 +7	
19.2 Labor income in mining, mfg., and construction	Peaks Troughs	0 0	0 0	0 0	3 0	2 5	6 5	1 0	-0.5 0	-0.5 +0.7	1.0 1.5	-2 0	+1 +4	
20.2 Sales by retail stores, excl. food stores	Peaks Troughs	2 2	1 1	1 1	0 2	1 0	1 2	0 0	0 -1	-0.3 -3.0	3.7 2.8	-5 -7	+4 -1	
<i>Lagging Indicators</i>														
23.2 Labor cost per dollar of real GNP (Q)	Peaks Troughs	0 0	0 0	0 0	0 0	0 0	1 0	1 3	+7 +6	+6.7 +5.7	2.9 1.2	+3 +4	+10 +7	
24.1 Mfrs. finished goods inventories, book value	Peaks Troughs	0 —	1 1	1 0	0 1	0 0	0 2	0 1	+5.5 +9.5	+4.0 +7.7	4.5 6.8	-3.5 -2.5	+8.5 +16.5	

^a Note a rise from May 1952 to April 1953. This movement is too mild to be considered a specific cycle expansion.

^b Includes leads of 1-3 months, exact coincidences, and lags of 1-3 months.
* Included in the 1950 list of 21 indicators. For others on that list, see Table B.1.

APPENDIX C

Monthly Changes in Cyclical Indicators During Expansions and Contractions

AS NOTED in Chapters 3, 5, and 18, one of the ways to evaluate current changes in cyclical indicators is to compare them with changes during similar periods in the past—similar in the phase of the business cycle in which the change occurs. If, let us say, we believe that a business cycle peak has recently been reached (however tentatively we hold that belief), we can compare the changes in selected indicators since the peak date with their changes during the same intervals following earlier peaks. Such a comparison may persuade us that our tentative conclusion is wrong, or if it supports that conclusion, it may throw light on the origin, special features, and seriousness of the situation. Similar comparisons may aid diagnosis at a business cycle trough, help to appraise the vigor of the recovery, and reveal any peculiarities it may have.

Such comparisons need to be made continuously and on a standard plan if their full value is to be extracted. In Table C.1 the monthly figures (seasonally adjusted) for a selected list of indicators are converted to percentages of their value at the preceding business cycle peak, and the changes from the peak level are arrayed first in terms of the number of months elapsed since the peak, next in terms of the number of months elapsed since the following business cycle trough. The “recession pattern” tables can be used during business cycle contractions; the “recovery pattern” tables, during business cycle expansions. The former show how the indicator stood twelve, nine, six, and three months before each business cycle peak, at the peak, and three, six, nine, and so on up to twenty-four months after the peak, relative to its level at the peak date.¹ The latter show how the indicator stood twelve months before each business cycle trough and every third month thereafter up to twenty-four months after the trough, relative to its level at the preceding business cycle peak date.² Data for the twelve months preceding the peak and the trough are presented so that prior developments may be seen. Figures for every third month are usually sufficient to indicate the general drift of the

¹ This may not have been the series' own peak level, since it may have reached its peak earlier or later than the business cycle peak. The percentages entered at the peak month differ from zero only because the denominator is a three-month average entered on the peak month while the numerator is a single-month figure.

² By subtracting the figures at the trough date from those at succeeding dates, the increase during the expansion, taken as a percentage of the level at the preceding peak, may be obtained. Increases taken as a percentage of the trough level are not presented, since use of the preceding peak level as base generally yields more stable results. Besides, it is of interest to know when the level at the preceding peak has been regained.

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series (see Chart 3.11, Chapter 3). If necessary, figures for intervening months can be computed by consulting the appropriate tables in Volume II. Single-month figures can, of course, be distorted by the effects of strikes or other events.

By adding 100 to each of the figures in the tables, the data can be converted to percentages *of* the peak level rather than percentage changes from the peak level. This form is convenient for charting and is perhaps more readily understood.

The tables cover the twenty-six current indicators (1960 list) described in Chapter 3 and related historical series. In addition, all the indicators in the 1950 list of twenty-one are included. For the data on which the tables are based, see Volume II.

The International Business Machines Corporation generously provided the electronic computer facilities used in the computation of Table C.1.

TABLE C.1
Recession and Recovery Patterns
of Selected Indicators

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1.0, 1.1

Average Workweek, Manufacturing, NICB (1922-1935); BLS (1936-1958)

Unit: hours per week

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
May 1923	49.80	-3.0	-1.2	+1.0	-1.4	+2	-1.0	-2.0	-4.4	-6.4	-7.6	-4.6	-3.8	-3.6
Oct. 1926	48.43	-.3	-.7	-1.3	-.7	+3	-1.3	-1.7	-1.7	-2.3	-1.5	-2.8	-.5	-1.3
Aug. 1929	48.87	-1.0	-1.2	-.8	-.5	-.1	-4.2	-5.7	-8.1	-12.4	-15.1	-14.5	-12.4	-17.9
May 1937	40.07	-1.7	-2.4	+1.1	+2.1	+1	-4.4	-11.4	-13.1	-13.4	-9.6	-8.6	-6.2	-7.6
Feb. 1945	45.27	-.2	+3	+1	-.2	+1	-2.4	-9.9	-9.2	-10.5	-11.4	-10.5	-11.2	-10.8
Nov. 1948	39.67	+2.4	+1.3	+1.6	+1.1	+3	-.7	-1.7	-1.7	-1.4	+1	+1.6	+3.6	+3.6
July 1953	40.60	-.7	+1.2	+1.0	+1.5	.0	-1.5	-3.0	-3.0	-2.2	-2.2	-.7	.0	.0
July 1957	39.90	+1.0	+1.5	+1.2	+1.8	.0	-1.5	-2.5	-3.0	-1.5	-.8			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
July 1924	May 1923, 49.80	.0	-2.8	-3.8	-4.8	-8.4	-4.8	-3.2	-4.0	-3.6	-3.0	-3.4	-4.0	-3.4
Nov. 1927	Oct. 1926, 48.43	-.5	-1.3	-.5	-.7	-1.5	-1.3	-1.5	-.1	-.3	+1	+3	+8	-3.4
Mar. 1933	Aug. 1929, 48.87	-26.9	-32.7	-28.0	-28.2	-34.9	-14.9	-25.7	-30.8	-26.3	-27.2	-31.6	-28.2	-24.7
June 1938	May 1937, 40.07	-1.9	-6.9	-14.6	-13.4	-13.6	-7.9	-7.4	-6.4	-6.6	-5.6	-4.4	-6.4	-6.2
Oct. 1945	Feb. 1945, 45.27	+1	+1	-.4	-1.7	-8.5	-9.9	-9.6	-11.4	-11.2	-10.5	-10.3	-11.0	-11.0
Oct. 1949	Nov. 1948, 39.67	+1	-.9	-1.9	-1.7	-.9	-.2	+1.1	+2.9	+3.4	+2.9	+4.1	+2.1	+1.3
Aug. 1954	July 1953, 40.60	-.2	-2.0	-2.5	-2.7	-2.2	-1.5	-.5	+1.0	.0	+1.0	.0	-.7	-.7
Apr. 1958	July 1957, 39.90	+1.8	.0	-1.5	-2.5	-3.0	-1.5	-.8						

MONTHLY CHANGES IN CYCLICAL INDICATORS

2.0

Gross Accession Rate, Manufacturing, BLS

Unit: number per 100 employees

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Rate above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
12	9	6	3	3	6		9	12	15	18	21	24			
Jan. 1920	11.90	-1.08	-5.40	+2.53	+3.66	+17	-1.80	+63	-5.98	-8.91	-9.16	-10.89	-7.55	-6.30	
May 1923	11.06	-3.01	-.58	-1.39	+21	-.64	-3.85	-6.37	-6.28	-8.73	-8.46	-6.80	-6.64	-7.48	
Oct. 1926	4.29	+1.23	+87	-.12	+09	+05	-.98	-.50	-1.23	-1.22	-1.24	-1.10	-.50	.00	
Aug. 1929	4.27	-.30	+63	+80	+44	-.40	-1.95	-1.87	-2.33	-3.22	-3.27	-2.72	-2.72	-2.94	
May 1937	4.13	+49	+13	+79	+94	-.03	-1.18	-2.24	-.69	-.89	+40	+40	-.72	-.45	
Feb. 1945	5.70	+33	+1.04	+40	+30	-.20	-.30	.00	+2.70	+1.90	+90	+90	-.10	.00	
Nov. 1948	3.87	+93	+63	+43	+43	+13	-.57	-.27	-.27	-.37	-.17	+53	+1.43	+53	
July 1953	3.97	+33	+83	+53	+73	+03	-.97	-1.07	-1.37	-1.07	-.67	-.47	-.17	-.67	
July 1957	2.97	+23	+83	+33	+13	+13	-.37	-.37	-.27	+13	+13				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Rate above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
12	9	6	3	3	6		9	12	15	18	21	24			
July 1921	Jan. 1920, 11.90	+63	-6.00	-8.91	-9.16	-10.89	-7.55	-6.30	-5.72	-3.40	-3.47	-.12	-.71	-2.29	
July 1924	May 1923, 11.06	-1.45	-5.31	-5.50	-7.35	-8.90	-8.67	-6.22	-6.56	-5.84	-5.54	-5.90	-6.89	-6.68	
Nov. 1927	Oct. 1926, 4.29	-.36	-.57	-.51	-1.47	-1.19	-1.38	-.58	-.32	+.61	+.78	+.42	-.42	-1.97	
Mar. 1933	Aug. 1929, 4.27	-2.87	-2.71	-1.96	-2.62	-3.10	+1.54	-1.66	-2.48	-.85	-2.27	-2.57	-.96	-2.22	
June 1938	May 1937, 4.13	-.31	-1.00	-1.58	-.82	-.70	-.49	-.07	-.55	-.36	+.90	-.51	-.98	+.32	
Oct. 1945	Feb. 1945, 5.70	-.20	+.70	-.50	-.10	+2.10	+2.20	+1.70	+1.50	+.40	.00	.00	-.90	-.80	
Oct. 1949	Nov. 1948, 3.87	+.23	-.67	-.67	-.47	-.47	-.07	+.03	+.63	+.93	+1.43	+1.13	+.23	+.23	
Aug. 1954	July 1953, 3.97	-.37	-.97	-1.17	-1.27	-1.17	-.27	-.37	-.17	-.17	-.27	-.47	-.57	-.67	
Apr. 1958	July 1957, 2.97	+.13	+.13	-.37	-.37	-.27	+.13	+.13							

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3.0

Layoff Rate, Manufacturing, BLS (inv.)

Unit: number per 100 employees

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Rate above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
Jan. 1920	.07	+3.48	+.29	+.12	-.07	+.07	-.07	+.15	+1.24	+1.88	+2.64	+2.16	+.97	+.31	
May 1923	.21	+.31	+.10	-.03	-.09	.00	+.13	+.43	+.10	+.57	+.38	+.45	+.09	+.20	
Oct. 1926	.50	-.10	-.11	-.05	+.13	-.08	+.52	+.22	+.04	+.25	+.20	+.02	+.03	-.08	
Aug. 1929	.52	-.02	-.19	-.12	-.10	-.04	+.54	+.66	+.52	+.99	+.50	+.40	+.45	+.35	
May 1937	1.71	+.24	+1.29	-.20	-.02	-.02	+.77	+3.86	+2.55	+1.91	+.72	+.65	+.32	+.79	
Feb. 1945	.63	+.12	-.14	-.13	-.03	+.07	+.47	+9.67	+1.37	+.97	+.67	+.07	+.17	+.17	
Nov. 1948	1.60	-.70	+.10	-.70	-.20	-.10	+.60	+1.30	+.50	+.80	.00	-.60	-.90	-.60	
July 1953	1.20	+1.10	-.50	-.40	-.30	-.10	+.70	+1.10	+1.10	+.50	+.50	.00	.00	+.30	
July 1957	1.60	-.20	-.20	-.40	-.20	.00	+.80	+1.30	+1.20	+.80	+.20				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Rate above (+) or below (-) standing at peak													
		Months Before Trough				Trough Month	Months After Trough								
12	9	6	3	3	6		9	12	15	18	21	24			
July 1921	Jan. 1920, .07	+.15	+1.24	+1.88	+2.64	+2.16	+.97	+.31	+.66	+.24	+.26	+.08	+.11	+.27	
July 1924	May 1923, .21	+.13	+.20	+.25	+.35	+.37	+.46	+.08	+.31	+.19	+.19	+.18	+.24	+.42	
Nov. 1927	Oct. 1926, .50	+.09	+.32	+.07	+.34	+.14	+.20	+.12	.00	-.17	-.10	-.08	-.02	+.56	
Mar. 1933	Aug. 1929, .52	+1.05	+1.14	+.68	+.74	+1.34	-.11	+.32	+.83	+.45	+.71	+.82	+.38	+.55	
June 1938	May 1937, 1.71	+.16	+1.71	+4.15	+2.43	+1.94	+1.50	+.66	+.73	+.77	+.22	+.27	+1.02	+.64	
Oct. 1945	Feb. 1945, .63	-.13	-.03	+.27	+1.07	+1.77	+.97	+.87	+.07	+.47	+.17	+.37	+.57	+.27	
Oct. 1949	Nov. 1948, 1.60	-.30	+.70	+1.10	+.80	+.80	-.10	-.40	-.90	-.80	-.70	-.60	-.20	-.20	
Aug. 1954	July 1953, 1.20	+.20	+.90	+1.00	+.80	+.60	+.30	-.10	.00	+.20	-.10	+.50	+.50	+.10	
Apr. 1958	July 1957, 1.60	-.20	.00	+.80	+1.30	+1.20	+.80	+.20							

MONTHLY CHANGES IN CYCLICAL INDICATORS

4.0, 4.1, 4.2

New Orders, Durable Goods, Manufacturing Industries, NBER, Physical Volume (1919-1933);
NIBC, Value (1929-1940); Census-OBE, Value (1944-1958)

Unit: 1923-25=100 (1919-1933); 1935-39=100 (1929-1940); million dollars (1944-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
12	9	6	3	3	6		9	12	15	18	21	24			
Jan. 1920	56.43					-3.8	+8.1	-8.6	-42.0	-56.0	-35.8	-37.3	+8.8	-2.4	
May 1923	85.73	+39.4	+14.5	+9.2	+35.9	-3.0	-.7	-.5	+14.4	-13.6	+18.2	+43.8	+7.9	+7.8	
Oct. 1926	97.47	+15.3	+14.5	-.5	+7.9	-4.1	+9.8	-3.6	-10.7	-10.7	+2.6	+5	+5	-7.7	
Aug. 1929	87.67	+10.6	+20.9	+16.4	+16.4	+1.5	-17.9	-17.9	-31.6	-43.0	-48.7	-52.1	-53.2	-60.1	
Aug. 1929	151.0			+7.3	-2.0	-2.0	-24.5	-12.6	-29.8	-39.7	-51.0	-54.3	-52.3	-62.2	
May 1937	122.0	-22.1	-21.3	+5.7	+9.8	-8.2	-14.8	-31.1	-36.9	-41.8	-32.0	-18.8	-19.7	-16.4	
Feb. 1945	8158.0	-52.1	-12.2	-19.7	-35.8	+14.1	-41.5	-239.8	-40.7	-44.7	-12.0	-26.1	-27.5	-24.6	
Nov. 1948	7485.3	-4.1	-5.5	-7.5	+1.1	+2.6	-7.7	-17.9	-10.9	-4.5	+4	+26.0	+90.5	+47.3	
July 1953	11125.3	+2.6	+5.3	+13.5	+7.0	+4.4	-13.5	-18.2	-15.1	-11.7	-.2	+11.5	+12.3	+23.7	
July 1957	13138.0	+7.2	+8.9	+7.9	+7	-1.0	-7.5	-18.5	-17.5	-4.8	+3.0				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
July 1921	Jan. 1920, 56.43	-8.6	-42.0	-56.0	-35.8	-37.3	+8.8	-2.4	+88.2	+88.7	+59.8	+132.1	+48.8	+42.1
July 1924	May 1923, 85.73	-6.4	+3.3	+26.2	-11.1	+19.1	+27.8	+25.6	+8.2	+22.2	+31.1	+30.2	+13.1	+22.7
Nov. 1927	Oct. 1926, 97.47	+1.4	+9.8	+5.7	-5.6	-.5	+3.6	+5.7	-.5	+8.8	+4.6	+4.6	-8.7	-26.1
Mar. 1933	Aug. 1929, 87.67	-74.9	-76.0	-69.2	-76.0	-77.2	-53.2							
Mar. 1933	Aug. 1929, 151.0	-76.2	-78.1	-78.8	-78.8	-82.1	-65.6	-67.6	-62.2	-64.2	-60.9	-67.6	-58.3	-55.6
June 1938	May 1937, 122.0	-12.3	-19.7	-37.7	-35.2	-40.2	-32.8	-19.7	-19.7	-9.8	+58.2	-2.5	-10.6	+23.8
Oct. 1945	Feb. 1945, 8158.0	-49.6	-.4	-18.2	-44.3	-50.5	-28.5	-21.6	-24.1	-24.5	-26.5	-22.9	-27.9	-14.1
Oct. 1949	Nov. 1948, 7485.3	-2.3	-15.4	-16.9	-21.6	-11.5	-.2	+9.5	+52.8	+58.3	+112.7	+75.5	+62.0	+63.7
Aug. 1954	July 1953, 11125.3	-9.9	-15.4	-11.5	-14.5	-7.8	-2.4	+12.5	+21.9	+35.8	+37.4	+29.2	+31.7	+55.9
Apr. 1958	July 1957, 13138.0	+7	-1.0	-7.5	-18.5	-17.5	-4.8	+3.0						

APPENDIX C

5.0

Housing Starts, Number of New Dwelling Units, Census

Unit: thousand units, annual rate

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
Feb. 1945	122.7	+56.5	+17.4	-5.4	-5	+1.1	+17.4	+45.1	+226.1	+475.5	+461.7	+424.2	+400.5	+484.5
Nov. 1948	807.0	+27.3	+7	+23.5	+11.2	-1	-3.5	+12.9	+27.4	+54.2	+61.1	+80.5	+84.1	+37.2
July 1953	1038.0	+4.0	+9.0	+6.4	+9.2	-2	-4	+1.2	+7.5	+17.5	+22.8	+35.8	+31.3	+26.8
July 1957	1022.0	+4.7	+2.9	-5.9	-5.9	-7	-2	-2	-3.8	+14.9	+27.5			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
Oct. 1945	Feb. 1945, 122.7	-10.3	-5.4	+7.6	+41.0	+138.9	+449.4	+478.8	+422.6	+399.7	+462.5	+473.9	+587.2	+740.5
Oct. 1949	Nov. 1948, 807.0	-6	-9	+10.5	+19.4	+42.4	+62.3	+71.2	+81.9	+41.5	+68.5	+20.8	+13.8	+25.4
Aug. 1954	July 1953, 1038.0	-3.0	+2.9	+6.0	+6.2	+18.1	+32.6	+27.6	+33.0	+26.3	+13.3	+8.6	+10.4	+9.4
Apr. 1958	July 1957, 1022.0	-5.9	-7	-2	-2	-3.8	+14.9	+27.5						

Residential Building Contracts, Value, Dodge, 27 States (1917-1921;
Floor Space, 27 States (1919-1926); 36 States (1923-1928);
37 States (1925-1956); 48 States (1956-1958)

Unit: million dollars (1917-21); million square feet (1919-58)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
AUG. 1918	28.13	-15.4	-21.8	+1.0	-21.8	+9.5	-57.0	+11.3	+147.0	+218.5	+195.4	+123.2	+81.6	+31.9
Jan. 1920	18.053	-64.4	-8.4	+68.0	-21.8	-8.2	-5.2	-52.3	-45.7	-54.0	-22.3	-10.1	+18.1	+23.6
May 1923	27.990	-4.5	-8.9	-6	+8.0	+3.9	-7.4	+14.9	+33.3	+4.2	-5.7	+8.8	+13.0	+27.8
May 1923	31.210				+9.6	+7.4	-5.4	+12.5	+33.7	+7.9	-3.5	+7.5	+19.0	+30.6
Oct. 1926	41.583	+22.0	+11.9	-2.8	-2.1	-2.4	-2.0	-7.4	-12.8	-3.8	+23.6	+7.2	+8.0	+1.9
Oct. 1926	43.160	+20.9	+13.2	-2.9	-1.0	-1.9	-1	-7.2	-12.6	-3.9	+24.1	+6.5	+7.8	+8
Aug. 1929	31.863	+44.2	+35.0	+7.0	+9.1	-4.4	-31.5	-40.3	-36.5	-45.5	-39.7	-35.0	-40.7	-54.3
May 1937	20.657	-19.8	+18.1	+4.0	+36.3	-10.0	-8.4	-21.1	-26.3	-15.0	+1.9	+5.9	+36.6	+34.9
Feb. 1945	5.040	+38.1	+16.9	-1.8	-5.2	+6.7	+65.3	+52.6	+218.8	+374.6	+1109.7	+804.8	+572.0	+705.4
Nov. 1948	35.313	+26.0	+11.4	+24.1	+7.0	-1.0	-5.6	+3.3	+17.1	+57.1	+63.7	+103.8	+113.6	+79.4
July 1953	55.893	+7.0	+12.7	+17.7	+2.7	+17.4	+13.4	+10.5	+17.0	+25.0	+47.6	+60.2	+56.9	+58.0
July 1957	102.170	-8.0	-7.6	-4.8	-7.1	+1.1	+3.1	-5.1	-5.8	+21.7	+40.1			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
12	9	6	3	3	6		9	12	15	18	21	24			
Mar. 1919	Aug. 1918, 28.13	+15.2	+4.5	-1.9	-37.8	+35.4	+181.2	+186.5	+208.5	+118.2	+21.9	+24.4	+15.9	+79.9	
July 1921	Jan. 1920, 18.053	-52.3	-45.7	-54.0	-22.3	-10.1	+18.1	+23.6	+36.9	+57.1	+38.8	+68.2	+69.5	+52.7	
July 1924	May 1923, 27.990	-1.5	+21.4	+52.7	+17.7	-13.2	-1.5	+3.8	+28.9	+68.0	+52.6	+48.1	+27.4	+31.6	
July 1924	May 1923, 31.210	-03	+22.3	+49.8	+19.4	-5.1	-03	+5.9	+28.8	+79.1	+62.5	+49.1	+29.6	+30.4	
Nov. 1927	Oct. 1926, 41.583	-2.6	-6.7	-20.7	-2.4	+6	+27.9	+17.4	+6.3	-5					
Nov. 1927	Oct. 1926, 43.160	-3.0	-6.2	-20.3	-1.6	+1.5	+28.0	+17.1	+6.5	-3	-21.0	-19.4	-29.4	-49.4	
Mar. 1933	Aug. 1929, 31.863	-77.0	-83.0	-79.2	-86.7	-85.6	-79.4	-79.8	-76.6	-79.0	-83.6	-84.5	-83.9	-73.4	
June 1938	May 1937, 20.657	-8.5	-15.9	-33.4	-7.5	-4.6	-3.3	+23.6	+41.6	+23.2	+46.5	+22.8	+43.3	+50.4	
Oct. 1945	Feb. 1945, 5.040	+15.7	-8.3	+74.8	+69.6	+115.9	+360.5	+965.7	+817.8	+578.2	+985.4	+616.7	+588.3	+834.9	
Oct. 1949	Nov. 1948, 35.313	-5.2	-25.9	-1.7	+16.2	+55.1	+56.8	+122.8	+125.3	+65.7	+79.0	+50.0	+55.7	+42.8	
Aug. 1954	July 1953, 55.893	-4.7	+2.2	+9.6	+21.6	+26.3	+45.9	+55.1	+39.2	+46.8	+49.7	+60.5	+54.8	+43.6	
Apr. 1958	July 1957, 102.170	-7.1	+1.1	+3.1	-5.1	-5.8	+21.7	+40.1							

APPENDIX C

6.0

Commercial and Industrial Building Contracts, Floor Space, Dodge, 27 States (1919-1925);
36 States (1923-1928); 37 States (1925-1956); 48 States (1956-1958)

Unit: million square feet

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
Jan. 1920	33.240	-72.2	-58.9	-14.8	+1	+1.7	-37.7	-56.9	-70.7	-78.0	-75.0	-72.6	-65.1	-70.4	
May 1923	14.237	-1.4	+28.5	-1.9	+6.3	+14.4	-35.3	-10.2	+5.0	-19.7	-33.8	-6.0	-30.0	+8.8	
May 1923	17.463				+6.1	+17.6	-32.3	-20.3	-1.6	-19.8	-31.2	-10.1	-21.5	+2.2	
Oct. 1926	19.140	+4.8	+5.5	-3.6	+1.4	-3.8	-9.0	+6	-10.4	-7.7	-7.4	+16.7	+13.5	+18.4	
Oct. 1926	19.873		+6.6	-3.4	+1.0	-3.3	-8.2	+3.4	-10.2	-7.8	-2.7	+16.7	+15.0	+19.9	
Aug. 1929	22.560	-6.3	+2.7	+12.4	+6.2	+5.8	+2.8	-23.3	-35.6	-51.0	-64.8	-70.2	-71.9	-81.5	
May 1937	11.527	-34.8	-24.8	-17.1	-14.7	-4.6	+11.7	-39.0	-53.2	-46.6	-47.2	-46.2	-34.1	-35.3	
Feb. 1945	12.933	-36.0	-59.0	-54.0	-13.3	-13.7	-24.3	+9.4	+171.5	+183.8	+202.4	+82.4	+47.6	+49.4	
Nov. 1948	14.887	+40.9	+40.6	+45.3	+10.4	-.04	-15.5	-20.2	-39.4	-14.0	-16.6	+35.8	+66.2	+65.0	
July 1953	20.233	-23.9	-14.4	-14.9	-6.1	+39.1	+9.3	-5.7	-3.5	-7.8	+10.7	+14.1	+11.8	+33.1	
July 1957	35.863	-1.5	-13.0	+13.6	-11.8	-6.4	-10.3	-13.1	-26.8	-16.0	-4.2				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak*													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
July 1921	Jan. 1920, 33.240	-56.9	-70.7	-78.0	-75.0	-72.6	-65.1	-70.4	-60.8	-53.2	-59.9	-62.7	-58.2	-67.2	
July 1924	May 1923, 14.237	-23.3	-21.0	-20.0	-24.7	-38.3	-14.2	+11.1	+6.1	+9.2	+16.2				
July 1924	May 1923, 17.463	-25.6	-27.4	-21.4	-27.7	-36.8	-17.2	+2.5	+9	+10.3	+14.8	+15.6	+5.7	+11.1	
Nov. 1927	Oct. 1926, 19.140	-7.9	-6.7	-1.6	-11.8	-17.8	+2.4	+7	+6.4	+14.5					
Nov. 1927	Oct. 1926, 19.873	-7.7	-4.8	-7	-10.6	-17.3	+9.7	+1.8	+6.3	+16.6	+27.6	+20.6	+20.1	+16.6	
Mar. 1933	Aug. 1929, 22.560	-85.4	-88.1	-88.4	-89.4	-89.4	-79.8	-83.3	-83.6	-81.7	-86.0	-82.4	-81.6	-85.0	
June 1938	May 1937, 11.527	+5.6	-12.2	-36.2	-45.1	-50.8	-59.4	-48.6	-33.8	-31.6	-18.1	-22.7	-16.8	-6.0	
Oct. 1945	Feb. 1945, 12.933	-43.7	-22.0	+3.6	+11.8	+105.1	+187.2	+161.3	+136.0	+103.2	+83.1	+53.7	+64.9	+63.5	
Oct. 1949	Nov. 1948, 14.887	+11.8	-9.3	-7.6	-21.7	-18.4	-13.5	+30.4	+32.5	+52.2	+106.5	+31.3	+7.7	-6.3	
Aug. 1954	July 1953, 20.233	-8.1	+11.1	-21.1	+5.8	-1.9	-7.2	+24.6	+11.4	+26.0	+32.6	+42.7	+30.4	+20.2	
Apr. 1958	July 1957, 35.863	-11.8	-6.4	-10.3	-13.1	-26.8	-16.0	-4.2							

MONTHLY CHANGES IN CYCLICAL INDICATORS

7.0

Net Change in Number of Operating Businesses, OBE (Q)

Unit: thousand firms

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Thousand firms above (+) or below (-) standing at preceding peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
I 1945	42					0	+5	+20	+54	+76	+70	+54	+41	+28
IV 1948	20	+25	+17	+12	+3	0	-9	-16	-20	-11	-8	-3	-4	-6
II 1953	13	+5	+4	+4	+4	0	-1	-3	-6	-3	0	+4	+10	+11
III 1957	16	+5	+5	+2	+1	0	-3	-8	-3	0	+1			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Thousand firms above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
IV 1945	I 1945, 42		0	+5	+20	+54	+76	+70	+54	+41	+28	+15	+8	+3
IV 1949	IV 1948, 20	0	-9	-16	-20	-11	-8	-3	-4	-6	-7	-9	-7	-6
III 1954	II 1953, 13	-1	-3	-6	-3	0	+4	+10	+11	+11	+11	+11	+10	+8
II 1958	III 1957, 16	+1	0	-3	-8	-3	0	+1						

APPENDIX C

7.1, 7.2, 7.3

Number of New Incorporations, Evans, 4-11 States (1860-1939);
Corporation Trust Co., 4 States (1936-1947);
Dun and Bradstreet, 48 States (1947-1958)

Unit: number

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
Oct. 1860	8.7		+15.4	-76.9	-53.8	-7.7	-19.2	-42.3	-100.0	-53.8	-7.7	-42.3	+26.9	-42.3	
Apr. 1865	44.3	-23.3	-12.0	-41.4	+19.5	-9.8	-8	-12.0	+8.3	+3.8	-27.8	-8	-12.0	-32.3	
June 1869	55.3				+1.2	-6.0	+6.6	-6	-13.2	-20.5	+17.5	+10.2	-6	-9.6	
Oct. 1873	45.7	+13.9	+33.6	+22.6	+24.8	-8.0	-1.5	+5.1	+7.3	+55.5	+29.2	+42.3	+35.8	+40.1	
Mar. 1882	129.0	+14.0	+1.6	+17.0	+20.9	+2.3	+24.8	+4.6	+4.6	+1.6	+28.7	+10.1	+13.2	+7.0	
Mar. 1887	240.3					-2.6	+1.5	-3.0	-18.4	-8.0	-9.2	+3.6	+6.5	+10.3	
July 1890	330.7	+1.3	-26.2	-17.1	-7.8	+11.0	+4	-3.8	-10.8	+1.6	+5.2	+4.9	+6.4	+7	
Jan. 1893	370.0	-6.2	-4.9	-10.0	-11.6	+3.8	-4.6	-23.2	-42.2	-22.7	-27.8	-24.6	-10.8	-17.6	
Dec. 1895	437.7		-11.1	-10.7	+1.7	+3	-5.2	-13.2	-36.7	-9.5	-7.0	-13.0	+13.8	+6.9	
June 1899	618.0	-34.6	-39.5	-34.5	-7.3	+1.9	-2.9	-6.8	-10.0	-6.8	+3	+10.7	+19.9	+34.6	
Sept. 1902	952.0			-14.4	-10.5	-2.4	-2.6	-2.6	-2.7	+1.4	+4.1	-10.1	-3.5	+2.4	
May 1907	1233.7	-5	-1.0	+1.8	-3	-9	-8.3	-30.3	-27.4	-26.8	-18.7	-16.7	+8	-7.2	
Jan. 1910	1183.7	-5.9	-0.5	+6.3	-5.5	-6.7	-2.1	-17.5	-12.5	-3.3	-7.8	-10.0	-4.8	-2.3	
Jan. 1913	1233.0	-6.2	-7.7	+5.3	+3.6	+1.4	+2.8	-6.2	-1.3	-13.3	-9.3	-6.6	-20.9	-17.4	
Aug. 1918	508.7			+13.4	+14.8	+9.1	-14.1	+52.6	+85.6	+134.5	+146.1	+152.0	+128.8	+116.4	
Jan. 1920	1312.7	-44.9	-31.8	-5.5	-5.9	+7	-4.8	-13.3	-15.8	-32.0	-26.4	-30.4	-31.1	-29.5	
May 1923	3628.3				+8	-3.3	-1.6	-1.8	-13.9	-20.3	-26.2	-20.8	-10.3	-4.9	
Oct. 1926	3567.3	+10.4	+4.1	-2.0	+4.0	+4	-6	+3.9	-7	+0.2	+4.4	+5.3	+7.9	+15.0	
Aug. 1929	3466.3			+6.0	+7.5	+2.2	-4.2	-7.2	-5.0	-17.6	-10.9	-12.6	-11.9	-12.9	
May 1937	2301.7	+1.0	-4.0	+1.4	+5.1	-4.7	-8.3	-10.1	-16.0	-13.9	-9.4	-13.1	-14.2	-2.3	
May 1937	2177.7	+1.3	-4.7	+3.3	+5.5	-5.4	-8.2	-10.0	-15.4	-13.5	-9.3	-12.4	-13.8	-2.4	
Feb. 1945	1397.7	-30.7	-13.3	-10.8	+14.6	-1.1	+15.5	+11.3	+129.1	+229.5	+228.3	+191.9	+141.2	+137.2	
Nov. 1948	7185.3	+32.0	+21.8	+14.8	+7.6	+1.4	-6.8	-3.2	+0.2	+6.8	+13.3	+16.6	+5.5	-1.1	
July 1953	8481.0	-11.0	-3.0	-6.2	+4.8	+2.6	-5	-4	+13.2	+14.4	+26.3	+37.5	+34.6	+39.6	
July 1957	11672.7	+3.8	-1.1	-3.6	-1.4	+1	-3.6	-5.4	-8.9	+7.1	+17.1				

MONTHLY CHANGES IN CYCLICAL INDICATORS

7.1, 7.2, 7.3

Number of New Incorporations, Evans, 4-11 States (1860-1939);
Corporation Trust Co., 4 States (1936-1947);
Dun and Bradstreet, 48 States (1947-1958)

Unit: number

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
June 1861	Oct. 1860, 8.7	-30.8	+27.0	+38.5	+3.8	-42.3	-65.4	-88.5	-30.8	-42.3	-7.7	-53.8	+26.9	+50.0	
Dec. 1867	Apr. 1865, 44.3	-3.0	-30.1	-18.8	-21.0	-14.3	-23.3	-23.3	-12.0	-23.3	-5.3	-12.0	-8	-7.5	
Dec. 1870	June 1869, 55.3	-6	-13.2	-20.5	+17.5	+10.2	-6	-9.6	-15.1	+6.6	-4.2	+10.2	+12.0	-18.7	
Mar. 1879	Oct. 1873 45.7	-12.4	-16.8	-36.5	+9.5	-25.5	+7.3	-1.5	+75.2	+99.3	+64.2	+116.8	+101.5	+200.0	
May 1885	Mar. 1882, 129.0	-1.6	-14.0	-37.2	-13.2	-20.9	-3.9	-12.4	+17.0	+1.6	-6.2	+54.3	+29.5	+67.4	
Apr. 1888	Mar. 1887, 240.3	+18.6	-18.4	+6.1	+7	-12.6	-13.9	-9.3	+9.8	+7.4	+39.4	+1.5	+14.0	+26.9	
May 1891	July 1890, 330.7	-5.3	-9.3	-3.2	-2.6	-11.1	-8.7	-2	+10.4	+2.5	+27.6	+3.1	+1.3	+11.9	
June 1894	Jan. 1893, 370.0	-20.3	-38.4	-28.6	-14.9	-24.3	-18.4	-20.8	-19.5	-19.2	-7.8	-9.2	-14.0	-21.4	
June 1897	Dec. 1895, 437.7	-13.2	-36.7	-9.5	-7.0	-13.0	+13.8	+7.0	+2.8	-7.7	-14.5	-7.5	+30.9	+43.9	
Dec. 1900	June 1899, 618.0	-6.8	-10.0	-6.8	+3	+10.7	+19.9	+34.6	+16.3	+28.2	+23.5	+29.1	+40.8	+40.4	
Aug. 1904	Sept. 1902, 952.0	-11.3	-8.9	-4.8	-4.7	+10.1	+1.9	+4.0	+18.5	+14.9	+23.2	+19.3	+29.0	+28.2	
June 1908	May 1907, 1233.7	+4	-15.0	-33.7	-28.1	-21.1	-14.8	-7.9	+2	-3.9	+2.6	+1.7	-14.9	-9.0	
Jan. 1912	Jan. 1910, 1183.7	-3.3	-7.8	-10.0	-4.8	-2.3	-3.9	+9.7	+8.0	+5.6	+7.1	-2.3	+2.8	-9.7	
Dec. 1914	Jan. 1913, 1233.0	-1.1	-5.7	-12.0	-21.4	-25.5	-14.7	-11.8	-7.5	+13.0	+3.7	+6.5	+13.4	+16.0	
Mar. 1919	Aug. 1918, 508.7	+9.5	+4.6	-19.0	+2.6	+56.7	+110.4	+137.1	+162.2	+149.3	+134.3	+118.0	+79.5	+92.1	
July 1921	Jan. 1920, 1312.7	-13.3	-15.8	-32.0	-26.4	-30.4	-31.1	-29.5	-25.7	-20.8	-16.6	-17.8	-14.4	-21.0	
July 1924	May 1923, 3628.3	-1.6	-13.1	-15.3	-16.1	-23.8	-22.5	-12.3	-7.3	+1.9	+8.6	+2.3	-3.7	+2.2	
Nov. 1927	Oct. 1926, 3567.3	-5	-1.5	-5	+3.0	+7.1	+11.8	+16.2	+9.3	+16.5	+16.3	+17.9	+12.0	+5.0	
Mar. 1933	Aug. 1929, 3466.3	-13.2	-8.4	-10.9	-17.6	-28.4	-10.9	-24.5	-27.0	-31.8	-34.1	-37.1	-38.8	-36.0	
June 1938	May 1937, 2301.7	-1.0	-9.7	-11.2	-14.2	-14.1	-13.5	-14.4	-9.2	-20.0	-21.3	-15.4			
June 1938	May 1937, 2177.7	-3	-10.8	-10.1	-14.1	-13.8	-13.8	-13.4	-8.7	-21.4	-21.5	-15.2	-18.1	-25.6	
Oct. 1945	Feb. 1945, 1397.7	+8.8	+2.0	+6.5	+22.8	+113.2	+211.0	+230.0	+206.9	+162.9	+136.8	+104.1	+101.8	+131.6	
Oct. 1949	Nov. 1948, 7185.3	+1.1	-2.6	-1.7	-2.8	+4.0	+11.7	+12.1	+8.8	+1.5	-4	-2.3	-5.8	-5.2	
Aug. 1954	July 1953, 8481.0	-1.9	-3	+5.9	+9.4	+22.5	+30.4	+41.1	+32.6	+36.3	+36.1	+46.0	+40.9	+40.7	
Apr. 1958	July 1957, 11672.7	-1.4	+1	-3.6	-5.4	-8.9	+7.1	+17.1							

APPENDIX C

8.0

Business Failures, Liabilities, Industrial and Commercial,
Dun and Bradstreet (Q, 1878-1894); (M, 1894-1958) (inv.)

Unit: million dollars

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	R E C E S S I O N P A T T E R N													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
I 1882	30.0	-26.7	-35.3	-67.0	-1.7	.0	-32.7	-38.3	+4.7	+15.3	+9.0	+70.3	+78.3	+20.7	
II 1887	29.1	-9.6	+2.8	+12.4	-5.5	.0	+175.6	+19.9	+14.1	+27.1	-16.5	+2.1	+26.5	- .3	
III 1890	39.0	+10.5	-.8	-16.9	-10.8	.0	+102.0	-7.4	+62.8	+24.9	+20.5	-13.8	-25.4	-47.4	
I 1893	40.4	-16.8	-28.0	-49.2	-27.5	.0	+280.7	+124.5	+108.9	+35.6	+17.8	-20.0	-4.0	+1.0	
Dec. 1895	15.60	-9.6	+1.9	+10.2	-5.8	-2.6	+12.2	-12.2	+154.5	+8.3	-20.5	-17.3	-12.2	-37.2	
June 1899	5.27	+131.6	+126.0	+86.1	+53.8	-12.6	+76.6	+105.1	+133.5	+80.4	+112.6	+124.0	+67.1	+131.6	
Sept. 1902	10.37	-10.3	-5.5	-24.8	+14.8	+8.0	-11.2	-2.6	-6.4	-21.9	+40.8	+28.3	-4.5	+39.9	
May 1907	12.67	+12.9	-23.4	+7.4	-28.2	-13.2	+31.8	+57.9	+89.5	+17.6	+106.8	+12.9	+16.8	+24.7	
Jan. 1910	18.90	-34.9	-20.6	-41.8	-39.2	+16.9	-1.0	-15.3	+3.7	-12.2	-5.8	-24.9	+5.3	-27.5	
Jan. 1913	18.07	-24.2	-1.5	+3.5	-9.8	-12.0	+7.4	+30.6	+15.1	+50.6	+19.6	+31.2	+69.4	+108.1	
Aug. 1918	12.70	+40.9	+7.1	+1.6	+6.3	-37.8	+8.7	-8.7	-2.4	-54.3	-27.6	-24.4	-8.7	+135.4	
Jan. 1920	7.80	+3.8	+53.8	-19.2	-1.3	-23.1	+62.8	+226.9	+460.2	+452.6	+375.6	+538.5	+665.4	+682.0	
May 1923	43.30	+10.2	-2.1	-7.8	-8.1	+1.8	-16.6	+15.0	-18.7	-9.0	+34.2	-28.9	-9.2	-8.1	
Oct. 1926	35.90	-7.8	+6	+3.1	-3.9	+3.9	+18.1	+42.6	+39.6	+13.4	+9.5	+1.7	-4.2	+9.5	
Aug. 1929	40.50	+51.4	-.7	-24.4	+3.7	-5.4	+32.3	+14.1	+39.8	+38.0	+40.7	+32.6	+34.6	+48.6	
May 1937	14.000	+52.9	-20.7	+35.7	+5.0	-2.1	+18.6	+37.9	+57.8	+42.1	+29.3	+3.6	-7.1	+15.7	
Feb. 1945	3.613	-18.1	-23.6	-69.8	-14.2	-58.8	-37.4	-66.2	-63.7	-21.4	+3.2	+9.6	+171.2	+242.1	
Nov. 1948	26.690	-36.9	-2.1	-47.2	-18.8	-.6	+5.4	-6.0	+18.0	-7.2	-15.3	-13.3	-30.2	-23.2	
July 1953	35.167	-31.8	-11.0	-35.6	-23.3	+16.8	+14.6	-18.3	+18.5	-5.5	-10.4	+4.6	+3	-4.6	
July 1957	48.670	+3.1	+11.7	+7.8	+15.0	-6.2	+5.9	+28.5	+69.2	+38.5	+5.6				

MONTHLY CHANGES IN CYCLICAL INDICATORS

8.0

Business Failures, Liabilities, Industrial and Commercial
Dun and Bradstreet (Q, 1878-1894); (M, 1894-1958) (inv.)

Unit: million dollars

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
II 1885	I 1882, 30.0	+230.3	+85.0	+48.0	+31.3	+20.7	-12.3	-24.3	-15.3	-12.3	-.3	+9.0	-8.3	-3.0
I 1888	II 1887, 29.1	-5.5	.0	+175.6	+19.9	+14.1	+27.1	-16.5	+2.1	+26.5	-.3	+48.1	+33.0	+11.3
II 1891	III 1890, 39.0	-10.8	.0	+102.0	-7.4	+62.8	+24.9	+20.5	-13.8	-25.4	-47.4	-24.9	+3.6	+294.4
II 1894	I 1893, 40.4	+280.7	+124.5	+108.9	+35.6	+17.8	-20.0	-4.0	+1.0	+4.0	+8.4	+12.4	+20.5	+5.7
June 1897	Dec. 1895, 15.60	-12.2	+154.5	+8.3	-20.5	-17.3	-12.2	-37.2	-35.2	-21.8	-23.7	-37.2	-48.1	-70.5
Dec. 1900	June 1899, 5.27	+105.1	+133.5	+80.4	+112.6	+124.0	+67.1	+131.6	+76.6	+86.1	+48.1	+126.0	+112.6	+74.7
Aug. 1904	Sept. 1902, 10.37	+17.7	+65.0	+42.8	-5.5	+13.8	-14.1	-16.1	-5.5	-35.4	-2.6	-7.4	+37.9	-6.4
June 1908	May 1907, 12.67	+35.0	+58.7	+165.3	+71.3	+20.8	+45.3	+3.4	+8.9	+3.4	-29.7	+6.6	-4.5	+10.5
Jan. 1912	Jan. 1910, 18.90	-12.2	-5.8	-24.9	+5.3	-27.5	-5.8	-1.0	-13.8	-15.9	+2.6	+24.9	+10.0	+43.9
Dec. 1914	Jan. 1913, 18.07	+60.0	+6.3	+281.4	+46.1	+56.6	+19.0	+14.0	-2.6	+1.8	-14.8	-25.8	-30.3	-12.5
Mar. 1919	Aug. 1918, 12.70	+26.8	-6.3	+48.8	-9.4	-2.4	-15.8	-24.4	-38.6	-20.5	+229.1	+194.5	+267.7	+321.3
July 1921	Jan. 1920, 7.80	+226.9	+460.2	+452.6	+375.6	+538.5	+665.4	+682.0	+801.3	+496.2	+398.7	+421.8	+534.6	+432.0
July 1924	May 1923, 43.30	-4.2	+105.8	-2.1	+8.5	-1.2	-6.2	+3.9	-17.3	-7.4	-23.6	-16.6	-14.5	-20.3
Nov. 1927	Oct. 1926, 35.90	-9.8	+28.1	+13.1	+15.0	-.6	+23.1	+8.1	+70.8	+12.0	-14.8	+17.0	+6.7	+49.3
Mar. 1933	Aug. 1929, 40.50	+108.6	+113.3	+63.0	+46.7	-.2	-12.1	-51.6	-49.9	-46.7	-43.0	-54.6	-61.2	-65.7
June 1938	May 1937, 14.000	+11.4	-10.7	+99.3	+180.7	+38.6	+30.0	+161.4	+23.6	-5.0	-5.0	-17.1	-24.3	+2.9
Oct. 1945	Feb. 1945, 3.613	+5.7	+61.1	-73.7	+2	-13.9	+19.8	+1.6	-5.9	+77.1	+316.2	+332.0	+467.3	+490.0
Oct. 1949	Nov. 1948, 26.690	-16.0	-23.6	+16.1	-14.0	-20.1	+5.4	-22.7	-22.9	-44.3	-13.6	-38.0	-16.8	-.5
Aug. 1954	July 1953, 35.167	-8.8	+13.7	+16.1	+4.2	+4.1	+8.4	+2.2	-6.0	+15.1	+32.2	+19.5	+62.2	+75.8
Apr. 1958	July 1957, 48.670	+15.0	-6.2	+5.9	+28.5	+69.2	+38.5	+5.6						

APPENDIX C

9.0, 9.1

Corporate Profits After Taxes, Barger (Q, 1920-1938); OBE (Q, 1944-1958)

Unit: billion dollars, annual rate

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
I 1920	5.0					.0	-10.0	-34.0	-90.0	-90.0	-108.0	-104.0	-102.0	-68.0
II 1923	5.2	-46.2	-42.3	-13.5	-7.7	.0	-26.9	-40.4	-17.3	-44.2	-46.2	-25.0	-13.5	-9.6
III 1926	5.3	-3.8	.0	-11.3	-5.7	.0	-5.7	-15.1	-26.4	-22.6	-26.4	-17.0	-9.4	+5.7
III 1929	6.8	-17.6	-7.4	-14.7	-5.9	.0	-17.6	-42.6	-57.4	-79.4	-92.6	-95.6	-101.5	-110.3
II 1937	4.3	+25.6	-14.0	+4.6	+4.6	.0	-16.3	-53.5	-72.1	-81.4	-67.4	-34.9	-23.2	-14.0
II 1937	5.3	-22.6	-17.0	-3.8	+1.9	.0	-5.7	-34.0	-58.5	-69.8	-62.3	-41.5	-32.1	-22.6
I 1945	10.2	+5.9	+2.0	-2.0	-2.0	.0	-5.9	-32.4	-36.3	-13.7	+12.7	+52.0	+76.5	+80.4
IV 1948	20.2	-4.4	.0	+4.0	+2.5	.0	-15.3	-25.7	-20.3	-21.8	-16.8	+2.0	+28.7	+36.1
II 1953	19.6	-14.8	-15.3	-8.7	-1.5	.0	-4.6	-24.5	-17.8	-15.8	-14.8	-7.6	+8.7	+12.2
III 1957	22.5	-.4	+5.8	+5.3	-.9	.0	-10.2	-27.6	-24.0	-13.3	+9.9			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
III 1921	I 1920, 5.0	-34.0	-90.0	-90.0	-108.0	-104.0	-102.0	-68.0	-44.0	-40.0	-10.0	-4.0	+4.0	-24.0	
III 1924	II 1923, 5.2	-26.9	-40.4	-17.3	-44.2	-46.2	-25.0	-13.5	-9.6	-2.0	+1.9	-9.6	-3.8	+1.9	
IV 1927	III 1926, 5.3	-5.7	-15.1	-26.4	-22.6	-26.4	-17.0	-9.4	+5.7	+18.9	+9.4	+20.8	+28.3	+5.7	
I 1933	III 1929, 6.8	-120.6	-133.8	-139.7	-138.2	-135.3	-108.8	-77.9	-80.9	-76.5	-77.9	-95.6	-91.2	-79.4	
II 1938	II 1937, 4.3	.0	-16.3	-53.5	-72.1	-81.4	-67.4	-34.9	-23.2	-14.0	+4.6	+30.2			
II 1938	II 1937, 5.3	.0	-5.7	-34.0	-58.5	-69.8	-62.3	-41.5	-32.1	-22.6	-7.5	+17.0	+15.1	+15.1	
IV 1945	I 1945, 10.2	-2.0	.0	-5.9	-32.4	-36.3	-13.7	+12.7	+52.0	+76.5	+80.4	+72.5	+72.5	+89.2	
IV 1949	IV 1948, 20.2	.0	-15.3	-25.7	-20.3	-21.8	-16.8	+2.0	+28.7	+36.1	+13.9	-2.5	-12.4	-8.4	
III 1954	II 1953, 19.6	-4.6	-24.5	-17.8	-15.8	-14.8	-7.6	+8.7	+12.2	+21.9	+27.0	+22.4	+20.9	+14.3	
II 1958	III 1957, 22.5	-.9	.0	-10.2	-27.6	-24.0	-13.3	+9							

MONTHLY CHANGES IN CYCLICAL INDICATORS

9.0, 9.1

Corporate Profits After Taxes, Barger (Q, 1920-1938); OBE (Q, 1944-1958)

Unit: billion dollars, annual rate

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Billion dollars above (+) or below (-) standing at preceding peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
I 1920	5.0					.0	-5	-1.7	-4.5	-4.5	-5.4	-5.2	-5.1	-3.4
II 1923	5.2	-2.4	-2.2	-.7	-.4	.0	-1.4	-2.1	-.9	-2.3	-2.4	-1.3	-.7	-.5
III 1926	5.3	-.2	.0	-.6	-.3	.0	-.3	-.8	-1.4	-1.2	-1.4	-.9	-.5	+3
III 1929	6.8	-1.2	-.5	-1.0	-.4	.0	-1.2	-2.9	-3.9	-5.4	-6.3	-6.5	-6.9	-7.5
II 1937	4.3	-1.1	-.6	+2	+2	.0	-.7	-2.3	-3.1	-3.5	-2.9	-1.5	-1.0	-.6
II 1937	5.3	-1.2	-.9	-.2	+1	.0	-.3	-1.8	-3.1	-3.7	-3.3	-2.2	-1.7	-1.2
I 1945	10.2	+6	+2	-.2	-.2	.0	-.6	-3.3	-3.7	-1.4	+1.3	+5.3	+7.8	+8.2
IV 1948	20.2	-.9	.0	+8	+5	.0	-3.1	-5.2	-4.1	-4.4	-3.4	+4	+5.8	+7.3
II 1953	19.6	-2.9	-3.0	-1.7	-.3	.0	-.9	-4.8	-3.5	-3.1	-2.9	-1.5	+1.7	+2.4
III 1957	22.5	-.1	+3	+1.2	-.2	.0	+3	+2	-5.4	-3.0	+2			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Billion dollars above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
III 1921	I 1920, 5.0	-1.7	-4.5	-4.5	-5.4	-5.2	-5.1	-3.4	-2.2	-2.0	-.5	-.2	+.2	-1.2	
III 1924	II 1923, 5.2	-1.4	-2.1	-.9	-2.3	-2.4	-1.3	-.7	-.5	-.1	+.1	-.5	-.2	+.1	
IV 1927	III 1926, 5.3	-.3	-.8	-1.4	-1.2	-1.4	-.9	-.5	+.3	+1.0	+.5	+1.1	+1.5	+.3	
I 1933	III 1929, 6.8	-8.2	-9.1	-9.5	-9.4	-9.2	-7.4	-5.3	-5.5	-5.2	-5.3	-6.5	-6.2	-5.4	
II 1938	II 1937, 4.3	.0	-.7	-2.3	-3.1	-3.5	-2.9	-1.5	-1.0	-.6	+.2	+1.3			
II 1938	II 1937, 5.3	.0	-.3	-1.8	-3.1	-3.7	-3.3	-2.2	-1.7	-1.2	-.4	+.9	+.8	+.8	
IV 1945	I 1945, 10.2	-.2	.0	-.6	-3.3	-3.7	-1.4	+1.3	+5.3	+7.8	+8.2	+7.4	+7.4	+9.1	
IV 1949	IV 1948, 20.2	.0	-3.1	-5.2	-4.1	-4.4	-3.4	+.4	+5.8	+7.3	+2.8	-.5	-2.5	-1.7	
III 1954	II 1953, 19.6	-.9	-4.8	-3.5	-3.1	-2.9	-1.5	+1.7	+2.4	+4.3	+5.3	+4.4	+4.1	+2.8	
II 1958	III 1957, 22.5	-.2	.0	-2.3	-6.2	-5.4	-3.0	+.2							

APPENDIX C

10.0

Common Stock Price Index, Industrials, Rails, and Utilities, Standard and Poor's

Unit: 1935=39=100 (1871-1951); 1941=43=100 (1947-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
Oct. 1873	35.67	+16.4	+19.7	+17.5	+16.4	-1.9	+9.3	+7.7	+4.6	+6.3	+6.5	+8.8	+2.6	+4.6
Mar. 1882	48.43	+7.8	+13.4	+8.0	+3.8	-1.1	-1.9	+7.8	+8	-1.1	+6	-4.8	-7.9	-8.7
Mar. 1887	47.37	-8.4	-7.7	-3.1	-6	-1.1	+9	-5.2	-7.1	-10.5	-12.0	-5.2	-9.2	-8.4
July 1890	46.03	-4.0	-1.8	-2.5	-2.2	+6	-7.9	-12.4	-9.8	-13.5	-3.1	-3	+1.0	+8
Jan. 1893	46.23	-7	+6	+4	+1.0	+1.4	-4.4	-24.7	-18.9	-22.1	-17.6	-23.2	-21.7	-23.4
Dec. 1895	36.70	-2.4	-4.6	+7.1	+9.5	-1.6	-5	-1.6	-8.7	-3.8	-4.4	-2.7	+13.4	+8.4
June 1899	51.70	-18.4	-15.1	-8.7	+3.3	-1.7	+2.7	-2.7	+1.2	-5.2	-6.2	+10.8	+21.3	+37.3
Sept. 1902	72.97	-8.5	-9.0	-6.1	-3.8	+1.1	-7.8	-7.4	-17.8	-26.0	-24.9	-25.7	-25.6	-16.4
May 1907	67.83	+13.2	+20.0	+21.9	+14.3	-0.05	-7.1	-22.9	-18.6	-5.9	+1.9	+8.8	+8.5	+18.7
Jan. 1910	83.97	-9.7	-7.2	-9	+1.8	+6	-3.1	-14.0	-7.2	-7.7	-7.6	-4.0	-13.1	-9.1
Jan. 1913	77.00	-9	+4.3	+4.3	+6.9	+8	-4.7	-10.8	-10.3	-9.4	-11.9	-17.0	*	-19.2
Aug. 1918	64.10	+13.1	-6.7	-1.6	-1.4	+5	+6.9	+4.5	+18.9	+17.6	+21.8	+7.3	+6.9	+8
Jan. 1920	73.20	-8.9	-2.6	+10.4	+10.0	+2.5	-1	-8.2	-8.5	-17.5	-19.8	-24.2	-22.3	-15.3
May 1923	73.97	-2.0	+1.4	+1.1	+6.7	-4	-7.0	-5.0	+1.9	-2.7	+7.3	+10.7	+22.6	+21.9
Oct. 1926	108.77	-7.1	-1.2	-9.8	-2.9	-1.3	+2.5	+7.8	+13.8	+23.0	+30.5	+41.7	+40.0	+54.5
Aug. 1929	229.00	-31.6	-21.1	-14.0	-13.4	+6	-30.3	-23.7	-21.4	-31.9	-46.2	-44.8	-54.8	-56.0
May 1937	123.67	-13.0	-3.6	+6.0	+10.5	-3	+2.9	-29.2	-31.1	-36.9	-24.0	-19.6	-23.1	-28.5
Feb. 1945	111.07	-15.0	-12.5	-7.5	-7.5	+1.7	+6.4	+6.2	+23.3	+29.0	+38.9	+31.8	+8.6	+15.9
Nov. 1948	122.53	+9	-6.8	+6.3	+3.7	-1.7	-4.4	-3.9	-6	+5.4	+11.6	+19.9	+20.1	+27.4
Nov. 1948	155.57	-1.8	-9.4	+3.8	+2.5	-1.7	-5.1	-5.0	-1.7	+3.6	+10.6	+18.5	+18.5	+27.5
July 1953	242.10	+3.6	+2	+8.1	+2.1	+3	-1.0	+5.2	+14.1	+24.5	+32.9	+47.0	+56.0	+76.3
July 1957	473.00	+3.1	-2.2	-4.0	-4.8	+2.6	-12.8	-13.1	-10.5	-2.8	+7.7			

* N.Y. Stock Exchange closed.

MONTHLY CHANGES IN CYCLICAL INDICATORS

10.0

Common Stock Price Index, Industrials, Rails, and Utilities, Standard and Poor's

Unit: 1935-39=100 (1871-1951); 1941-43=100 (1947-1958)

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
Mar. 1879	Oct. 1873, 35.67	-24.3	-20.1	-17.6	-19.5	-14.5	-6.6	-1.0	+15.2	+23.6	+12.2	+21.7	+37.1	+46.4
May 1885	Mar. 1882, 48.43	-19.7	-18.0	-25.3	-25.0	-25.5	-18.9	-9.8	-8.9	-13.5	-7.5	-.3	-4.4	+1.6
Apr. 1888	Mar. 1887, 47.37	+2.4	-1.6	-8.4	-6.3	-10.1	-9.4	-5.6	-8.0	-8.6	-6.7	-4.6	-5.2	-5.0
May 1891	July 1890, 46.03	+2.1	-1.8	-14.4	-11.2	-10.1	-10.5	-4.8	-.1	+1.0	+2.1	+1.0	-.3	-12.4
June 1894	Jan. 1893, 46.23	-16.7	-21.3	-20.2	-18.7	-21.7	-18.9	-22.6	-24.3	-15.0	-13.0	-21.9	-21.0	-21.9
June 1897	Dec. 1895, 36.70	-1.6	-8.7	-3.8	-4.4	-2.7	+13.4	+8.4	+5.7	+15.0	+19.6	+28.6	+45.5	+38.4
Dec. 1900	June 1899, 51.70	-2.7	+1.2	-5.2	-6.2	+10.8	+21.3	+37.3	+29.2	+28.4	+32.5	+35.8	+42.7	+30.2
Aug. 1904	Sept. 1902, 72.97	-24.2	-28.0	-25.7	-25.7	-19.8	-6.7	+7	-2.6	+5.7	+6.6	+12.4	+5.3	+11.6
June 1908	May 1907, 67.83	-3.3	-8.3	-19.1	-15.4	-5.8	+7	+11.2	+10.1	+20.7	+25.6	+27.1	+22.8	+12.2
Jan. 1912	Jan. 1910, 83.97	-7.7	-7.6	-4.0	-13.1	-9.1	-4.4	-4.4	-2.0	-7.6	-12.6	-18.2	-17.7	-16.9
Dec. 1914	Jan. 1913, 77.00	-12.6	-9.6	-12.2	*	-20.5	-18.3	-13.1	-4.5	+4.7	+1.2	+3.2	+6.9	+8.2
Mar. 1919	Aug. 1918, 64.10	-3.4	-1.2	.0	+4.7	+7.6	+22.2	+19.5	+18.3	+15.0	+5.0	+4.4	-9.7	-8.7
July 1921	Jan. 1920, 73.20	-8.2	-8.5	-17.5	-19.8	-24.2	-22.3	-15.3	-4.6	-1.2	+7.5	+3.3	+5.6	-6.4
July 1924	May 1923, 73.97	-7.4	-7.8	+1.4	-2.4	+3.7	+4.9	+21.5	+18.2	+27.5	+36.5	+45.3	+32.6	+42.8
Nov. 1927	Oct. 1926, 108.77	+1	+4.7	+10.9	+18.4	+25.9	+28.4	+47.7	+44.0	+66.1	+81.0	+82.3	+111.7	+46.7
Mar. 1933	Aug. 1929, 229.00	-73.8	-84.3	-73.1	-78.1	-80.1	-65.5	-65.5	-67.6	-64.5	-66.1	-69.1	-68.1	-70.3
June 1938	May 1937, 123.67	-3.3	-10.2	-30.7	-36.0	-35.6	-27.5	-21.5	-22.4	-27.3	-19.4	-21.6	-21.8	-36.8
Oct. 1945	Feb. 1945, 111.07	-6.8	-2.4	+3.0	+6.6	+18.8	+30.4	+36.5	+34.7	+10.1	+12.7	+7.4	+13.4	+12.6
Oct. 1949	Nov. 1948, 122.53	+4.3	-1.3	-3.3	-3.9	+3.9	+10.3	+15.7	+12.8	+28.8	+37.6	+40.6	+41.0	+51.0
Oct. 1949	Nov. 1948, 155.57	+4.1	-1.3	-4.3	-5.1	+2.1	+8.5	+14.7	+11.7	+27.7	+36.3	+40.9	+41.0	+50.2
Aug. 1954	July 1953, 242.10	+7	+1.2	+7.5	+18.7	+26.9	+38.1	+52.0	+55.3	+75.3	+85.7	+83.5	+92.2	+100.3
Apr. 1958	July 1957, 473.00	-4.8	+2.6	-12.8	-13.1	-10.5	-2.8	+7.7						

* N.Y. Stock Exchange closed.

10.1

Unit: dollars per share

Stock Exchange closed.

MONTHLY CHANGES IN CYCLICAL INDICATORS

10.1

Industrial Stock Price Index, Dow-Jones

Unit: dollars per share

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	R E C O V E R Y P A T T E R N												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
Dec. 1900	June 1899, 71.550	-6.4	-11.2	-21.0	-22.0	-5.7	-4.2	+7.9	-2.5	-11.7	-7.5	-9.2	-7.8	-13.4
Aug. 1904	Sept. 1902, 65.233	-22.4	-32.8	-26.6	-26.3	-17.8	+4.3	+12.8	+14.6	+25.2	+30.8	+49.9	+38.2	+43.9
June 1908	May 1907, 81.050	-2.6	-13.0	-26.8	-19.2	-9.9	-.2	+5.6	+3.4	+13.6	+20.9	+20.9	+13.6	+3.3
Jan. 1912	Jan. 1910, 93.550	-11.0	-11.8	-8.2	-18.0	-13.1	-4.5	-4.0	-1.4	-9.0	-13.6	-17.5	-15.3	-13.8
Dec. 1914	Jan. 1913, 84.783	-9.1	-3.0	-5.0	a	-11.3	-7.5	+5.9	+26.3	+52.9	+43.8	+47.0	+66.8	+53.7
Mar. 1919	Aug. 1918, 82.100	-4.9	-2.0	+5	+5	+5.4	+26.2	+31.8	+28.9	+19.3	+11.7	+5.4	-12.0	-8.6
July 1921	Jan. 1920, 102.733	-11.7	-17.4	-27.2	-25.0	-33.2	-30.2	-21.5	-11.1	-7.5	-2.9	-4.4	-2.1	-13.1
July 1924	May 1923, 96.200	-7.2	-8.4	+1.7	-4.4	+3.2	+5.7	+26.4	+24.4	+39.2	+56.6	+62.3	+46.1	+63.0
Nov. 1927	Oct. 1926, 155.950	-1.3	+1.4	+8.2	+17.9	+21.8	+25.3	+38.7	+45.7	+76.3	+98.1	+98.9	+130.3	+46.3
Mar. 1933	Aug. 1929, 354.317	-77.1	-86.8	-80.0	-83.4	-83.7	-73.5	-71.9	-72.0	-71.1	-72.9	-74.5	-71.3	-71.8
June 1938	May 1937, 173.283	-1.7	-7.5	-28.2	-33.8	-29.1	-21.2	-12.8	-18.0	-22.0	-16.7	-14.4	-15.2	-32.0
Oct. 1945	Feb. 1945, 155.867	-5.4	-1.4	+2.8	+5.2	+18.7	+27.1	+30.7	+29.2	+8.8	+13.0	+10.4	+17.6	+16.6
Oct. 1949	Nov. 1948, 180.360	+2.6	-1.2	-2.9	-4.5	+3.2	+10.8	+17.9	+13.8	+27.1	+35.5	+40.5	+40.6	+49.6
Aug. 1954	July 1953, 269.803	+9	+2.7	+8.3	+19.7	+28.3	+39.3	+52.0	+56.2	+69.5	+76.6	+76.2	+83.5	+89.6
Apr. 1958	July 1957, 502.627	-3.4	+2.4	-11.8	-11.3	-11.1	-2.9	+7.4						
						a	Stock Exchange closed.							

APPENDIX C

11.0

Change in Business Inventories, OBE (Q)

Unit: billion dollars, annual rate

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Billion dollars above (+) or below (-) standing at preceding peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
I 1945	-1.6	+2.1	+1.0	+7	-1.5	.0	+1.6	-2	+8	+7.5	+10.4	+7.7	+6.3	+2.0
IV 1948	4.3	-2.9	-1.0	+8	+1.8	.0	-4.3	-9.6	-6.0	-9.6	-1.8	+6	+6	+10.7
II 1953	3.1	-5.3	+1.2	+2.2	-6	.0	-2.4	-7.7	-5.7	-5.8	-5.2	-2.3	+1.3	+3.0
III 1957	2.7	+1.3	+2.2	-5	+9	.0	-3.3	-9.6	-8.5	-6.1	-1.9			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Billion dollars above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
IV 1945	I 1945, -1.6	-1.5	.0	+1.6	-2	+8	+7.5	+10.4	+7.7	+6.3	+2.0	+6	-1.1	+3.0
IV 1949	IV 1948, 4.3	.0	-4.3	-9.6	-6.0	-9.6	-1.8	+6	+6	+10.7	+6.2	+10.9	+5.9	+6
III 1954	II 1953, 3.1	-2.4	-7.7	-5.7	-5.8	-5.2	-2.3	+1.3	+3.0	+2.6	+3.6	+3.1	+1.3	+9
II 1958	III 1957, 2.7	+9	.0	-3.3	-9.6	-8.5	-6.1	-1.9						

MONTHLY CHANGES IN CYCLICAL INDICATORS

12.0, 12.1

Industrial Raw Materials Spot Market Price Index, Peak (1919-1935);
BLS, 16 Commodities (1936-1947); 13 Commodities (1947-1958)

Unit: 1947-49=100 (1919-1935); 1939=100 (1936-1947); 1947-49=100 (1947-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
Jan. 1920	97.67	-20.1	-23.2	-10.0	-8.1	+1.8	+4.5	-5.7	-22.9	-45.0	-55.3	-57.4	-52.7	-51.4	
May 1923	66.90	-23.0	-18.4	-8.4	+3.4	+1	-13.3	-12.9	-7.5	-16.7	-10.3	-2.7	+2.4	-2.1	
Oct. 1926	56.30	+27.2	+18.3	+6.2	+3.6	-4	-3.4	-2.3	-3.4	-2.8	-1.4	-4.6	-6.2	-5.3	
Aug. 1929	54.17	-3.3	-3	+2.1	-1.4	+1	-5.5	-10.6	-17.5	-26.9	-33.0	-37.4	-41.8	-44.2	
May 1937	128.10	-23.2	-17.8	-10.4	+5	-9	-2.5	-22.7	-26.5	-32.9	-26.5	-23.0	-23.7	-23.0	
Feb. 1945	166.37	-2.6	-1.8	-5	-1.6	-0.4	+0.2	+6	+1.8	+2.3	+3.8	+22.6	+47.6	+64.6	
Nov. 1948	107.47	+7.8	+2.5	+1.2	+1.2	+1.6	-9.1	-24.0	-21.2	-20.7	-22.2	-18.0	+4.0	+33.3	
July 1953	86.07	+14.0	+9.7	+6.0	+1.1	-3	-6.6	-4.0	-1	+5	+2.7	+5.5	+7.1	+11.3	
July 1957	92.80	+1.7	+5.4	+5.9	+6	-1	-7.0	-10.6	-12.8	-9.3	-4.0				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
July 1921	Jan. 1920, 97.67	-5.7	+22.9	-45.0	-55.3	-57.4	-52.7	-51.4	-50.2	-44.9	-39.5	-32.6	-26.8	-39.2	
July 1924	May 1923, 66.90	-11.2	-12.9	-8.5	-12.9	-16.0	-7.2	+4.5	-1.9	+3.4	+7.0	-4	-10.6	-12.9	
Nov. 1927	Oct. 1926, 56.30	-2.1	-3.0	-2.8	-1.2	-2.8	-3.7	-4.3	-6.9	-4.1	-1.8	-5.2	-3.7	-9.1	
Mar. 1933	Aug. 1929, 54.17	-53.7	-60.9	-53.5	-58.8	-58.5	-38.5	-34.3	-34.8	-30.4	-31.5	-32.2	-32.8	-31.9	
June 1938	May 1937, 128.10	-4.1	-5.5	-24.9	-28.1	-33.6	-26.5	-25.1	-22.6	-22.7	-6.0	-1	-9.8	-10.9	
Oct. 1945	Feb. 1945, 166.37	-1.3	+0.2	+1	+1	+1.6	+2.1	+3.7	+23.7	+25.7	+60.0	+67.0	+59.6	+70.2	
Oct. 1949	Nov. 1948, 107.47	-1.6	-2.9	-23.7	-26.1	-23.4	-21.2	-21.8	-4.9	+22.9	+45.3	+39.0	+13.9	+13.1	
Aug. 1954	July 1953, 86.07	-5	-2.4	-5.2	+1.0	-4	+3.9	+8.1	+6.3	+11.9	+14.8	+15.1	+12.4	+12.2	
Apr. 1958	July 1957, 92.80	+6	-1	-7.0	-10.6	-12.8	-9.3	-4.0							

APPENDIX C

12.2, 12.3, 12.4

Wholesale Price Index, Bradstreet's (Q, 1892-1899), (M, 1899-1935);
Wholesale Price Index, 28 Basic Commodities, BLS (1936-1947);
22 Basic Commodities, BLS (1947-1958)

Unit: cents (1892-1935); August 1939=100 (1936-1947); 1947-49=100 (1947-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
12	9	6	3	3	6		9	12	15	18	21	24			
I 1893	783.60	+2.8	-2.0	-4.3	-1.5	.0	-3.5	-7.7	-10.0	-13.2	-15.5	-16.2	-14.6	-18.4	
IV 1895	641.60	+4.3	-.3	-3.4	+.9	.0	-5.1	-9.8	-10.6	-7.4	-5.2	-7.3	-4.1	+1.5	
June 1899	704.70				-1.8	-.04	+7.1	+13.5	+16.0	+10.2	+9.3	+8.3	+7.0	+5.9	
Sept. 1902	796.70	-3.8	-3.4	-2.4	-1.4	-.1	+1.8	+2.0	-1.2	-1.7	-.7	+.8	-3.2	-1.4	
May 1907	897.63	-7.4	-6.5	-1.7	+1.0	-.2	-1.1	-3.8	-10.2	-12.6	-11.8	-9.3	-8.0	-7.0	
Jan. 1910	914.07	-9.4	-9.1	-7.2	-3.1	+.1	-.2	-2.9	-2.6	-3.7	-7.1	-5.6	-3.2	-2.0	
Jan. 1913	947.60	-5.5	-3.1	-3.6	-.1	.0	-2.7	-5.2	-3.0	-6.4	-8.3	-8.4	-4.5	-.8	
Aug. 1918	1906.60	-13.3	-9.1	-5.3	-.7	-.03	-.6	-8.6	-7.4	+3.5	+5.1	+9.3	+6.5	-3.5	
Jan. 1920	2057.27	-13.1	-16.1	-5.5	-4.2	+.2	+.7	-7.2	-20.8	-39.2	-46.0	-47.0	-45.2	-44.6	
May 1923	1352.00	-12.7	-10.7	+.3	+2.3	+.04	-4.8	-1.7	-3.5	-8.1	-5.9	-.6	+2.5	-.4	
Oct. 1926	1275.47	+11.6	+8.7	+1.8	-.5	+.05	-.7	-2.1	-2.1	+4.5	+6.2	+5.3	+3.2	+2.5	
Aug. 1929	1263.00	+4.8	+3.6	+2.9	-.5	+.1	-2.5	-10.0	-14.0	-17.4	-21.2	-26.8	-30.5	-31.6	
May 1937	147.17	-24.2	-13.0	-7.2	+2.4	-.4	-3.8	-22.6	-25.7	-32.4	-29.5	-28.7	-29.7	-29.7	
Feb. 1945	183.33	-1.9	-1.2	-.5	-1.3	+.03	+.2	+.3	+1.9	+2.5	+4.6	+31.7	+58.4	+72.1	
Nov. 1948	303.77	+15.8	+7.2	+6.0	+4.2	+1.0	-9.7	-21.1	-19.4	-17.9	-18.4	-14.7	+2.6	+13.2	
Nov. 1948	103.70	+15.1	+6.5	+7.4	+6.6	+1.4	-13.1	-22.7	-19.0	-22.1	-20.8	-15.6	+2.0	+17.6	
July 1953	87.83	+10.3	+5.1	+1.8	-.3	+.5	-2.0	+.5	+5.8	+4.2	+2.6	+3.6	+2.7	+3.7	
July 1957	89.80	-1.1	+.8	+2.8	-.9	+.7	-5.8	-5.8	-5.6	-3.6	-3.5				

MONTHLY CHANGES IN CYCLICAL INDICATORS

12.2, 12.3, 12.4

Wholesale Price Index, Bradstreet's (Q, 1892-1899), (M, 1899-1935);
Wholesale Price Index, 28 Basic Commodities, BLS (1936-1947);
22 Basic Commodities, BLS (1947-1958)

Unit: cents (1892-1935); August 1939=100 (1936-1947); 1947-49=100 (1947-1958)

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
12	9	6	3	3	6		9	12	15	18	21	24			
II 1894	I 1893, 783.60	-3.5	-7.7	-10.0	-13.2	-15.5	-16.2	-14.6	-18.4	-20.9	-17.4	-18.1	-22.3	-26.2	
II 1897	IV 1895, 641.60	-9.8	-10.6	-7.4	-5.2	-7.3	-4.1	+1.5	+1.4	+1.4	+3.5	+5.2	+6.6	+8.9	
Dec. 1900	June 1899, 704.70	+13.5	+16.0	+10.2	+9.3	+8.3	+7.0	+5.9	+8.8	+9.2	+10.3	+11.4	+13.0	+15.1	
Aug. 1904	Sept. 1902, 796.70	-2.7	-1.4	+1.6	-1.3	-2.4	+8	+1.5	-4	+2.9	+3.6	+3.4	+4.3	+5.4	
June 1908	May 1907, 897.63	+4	-1.5	-6.3	-10.6	-13.4	-11.3	-8.2	-7.9	-6.1	-3.4	+2.2	+2.0	-6	
Jan. 1912	Jan. 1910, 914.07	-3.7	-7.1	-5.6	-3.2	-2.0	+5	-.05	+3.5	+3.7	+8	-1.7	+5	-2.9	
Dec. 1914	Jan. 1913, 947.60	-4.4	-7.2	-8.8	+2	-4.1	+2.3	+3.5	+4.4	+13.8	+22.1	+22.5	+25.7	+44.5	
Mar. 1919	Aug. 1918, 1906.60	-4.3	+0.3	-3	-1.5	-9.5	-3.0	+2.3	+6.3	+8.8	+2.9	-8.5	-31.1	-39.0	
July 1921	Jan. 1920, 2057.27	-7.2	-20.8	-39.2	-46.0	-47.0	-45.2	-44.6	-43.5	-41.2	-37.2	-33.3	-32.9	-37.0	
July 1924	May 1923, 1352.00	-4.2	-3.0	-2.1	-6.8	-8.1	-2.6	+2.9	-1	+3.9	+5.3	+2.6	-4.0	-6.1	
Nov. 1927	Oct. 1926, 1275.47	+0.4	-1.7	-2.5	-1	+5.6	+5.3	+4.4	+3.8	+2.6	+1.9	-1.5	-8	-3.4	
Mar. 1933	Aug. 1929, 1263.00	-42.7	-46.9	-42.8	-45.9	-49.0	-35.2	-28.6	-30.1	-27.0	-27.2	-25.0	-25.6	-23.0	
June 1938	May 1937, 147.17	-3.9	-6.1	-24.9	-27.0	-33.1	-29.6	-29.6	-29.3	-30.2	-17.0	-16.2	-22.0	-24.9	
Oct. 1945	Feb. 1945, 183.33	-7	-2	+2	+1	+1.3	+2.2	+3.8	+31.0	+37.6	+65.8	+74.4	+66.5	+84.4	
Oct. 1949	Apr. 1948, 303.77	+5	-4.9	-18.6	-23.2	-19.0	-17.9	-18.2	-5.2	+8.3					
Oct. 1949	Nov. 1948, 103.70	+8	-6.9	-22.8	-24.3	-22.5	-20.2	-20.3	-4.6	+10.3	+29.1	+25.3	+8.4	+7.8	
Aug. 1954	July 1953, 87.83	+9	-2	-0.4	+6.0	+3.8	+3.7	+4.2	+1.7	+1.2	+9	+8	+3.4	+3.9	
Apr. 1958	July 1957, 89.80	-9	+7	-5.8	-5.8	-5.6	-3.6	-3.4							

APPENDIX C

13.0

Employment in Nonagricultural Establishments, BLS

Unit: million persons (1929-1939); thousand persons (1944-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
Aug. 1929	30.903			-1.9	-.8	+4	-1.5	-4.6	-6.5	-9.6	-12.3	-14.3	-15.7	-18.2	
May 1937	29.677	-7.2	-5.2	-3.2	-1.3	+2	+6	-2.2	-7.1	-9.7	-9.3	-7.1	-5.8	-5.9	
Feb. 1945	41429.7	+1.6	+3	-.2	-.7	+2	-1.4	-3.3	-7.2	-6.3	-1.4	+1.8	+3.4	+4.3	
Nov. 1948	44678.3	-1.6	-1.3	-1.0	+1	+1	-1.6	-3.0	-3.5	-4.2	-4.4	-1.4	+2.0	+3.6	
July 1953	49875.0	-4.7	-1.6	-.5	-.1	+0.3	-.5	-2.0	-2.9	-3.5	-3.1	-2.1	-.8	+8	
July 1957	52445.3	-2.1	-.6	-.5	-.4	+0.3	-.8	-2.3	-4.6	-3.9	-3.6				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
Mar. 1933	Aug. 1929, 30.903	-24.5	-28.4	-29.2	-29.1	-31.3	-28.1	-22.8	-22.3	-19.7	-18.6	-20.3	-18.7	-17.0	
June 1938	May 1937, 29.677	+2	+2	-4.4	-7.9	-10.2	-8.6	-6.2	-5.7	-4.6	-3.1	-.4	-.9	-.2	
Oct. 1945	Feb. 1945, 41429.7	-.7	-.05	-.8	-2.4	-8.2	-5.1	-2.4	+7	+2.8	+4.1	+4.0	+4.6	+5.8	
Oct. 1949	Nov. 1948, 44678.3	+1	-1.0	-2.5	-3.7	-5.0	-3.8	-2.2	+7	+3.4	+4.7	+5.8	+6.2	+6.4	
Aug. 1954	July 1953, 49875.0	-.1	-1.1	-2.3	-3.2	-3.5	-2.6	-1.9	-.1	+1.1	+2.2	+3.0	+3.8	+4.3	
Apr. 1958	July 1957, 52445.3	-.4	+0.3	-.8	-2.3	-4.6	-3.9	-3.6							

MONTHLY CHANGES IN CYCLICAL INDICATORS

13.1, 13.2

Factory Employment Index, Jerome (1889-1921); BLS (1917-1958)

Unit: 1914=100 (1889-1921); 1923=100 (1917-1920); 1947-49=100 (1919-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
July 1890	57.33	-1.8	-1.4	-1.6	-1.3	-.4	+1.5	+1.9	+.8	+1.3	+1.3	+3.2	+5.5	+5.2
Jan. 1893	61.40	-3.6	-1.5	-1.8	-.3	.0	+.6	-5.4	-14.2	-15.0	-13.5	-12.5	-10.9	-7.0
Dec. 1895	59.33	-7.1	-3.2	-.9	+3.6	+.1	-1.6	-3.2	-4.3	-3.1	-2.2	-1.2	+4.3	+.4
June 1899	67.10	-10.0	-9.5	-7.6	-4.0	+.2	+2.2	+3.0	+3.9	+3.1	+2.4	+3.7	+4.5	+5.5
Sept. 1902	78.37	-7.5	-5.7	-3.6	-2.6	-.1	+1.3	+1.1	+1.6	+1.1	+.4	+.6	+0.4	+2.2
May 1907	92.47	-4.4	-2.9	-1.9	-1.3	-.2	+.6	-10.1	-20.2	-20.6	-8.5	-6.4	-2.0	+.2
Jan. 1910	99.63	-10.1	-7.6	-7.1	-1.9	+.4	-1.3	-.5	-1.4	-1.4	-.5	+.1	+.4	-.5
Jan. 1913	103.13	-3.9	-2.4	-3.1	+.1	+.4	-1.8	-1.8	-1.1	-2.0	-.8	-3.8	-3.8	-6.2
Aug. 1918	127.07	-5.5	-3.5	-1.5	-.3	+.02	-4.1	-9.4	-8.1	-2.2	-2.2	-.05	-.8	-5.2
Aug. 1918	115.43	-1.0	-.6	-.7	-1.1	+.6	-2.5	-10.7	-7.7	-3.4	-5.5	+.05	+1.9	
Jan. 1920	74.13	-7.6	-11.4	-6.9	-5.0	+1.0	-.8	-6.4	-12.4	-29.8	-28.4	-30.4	-28.4	-27.3
May 1923	67.97	-16.4	-12.6	-7.6	-2.7	-.1	-.8	-2.9	-3.5	-8.0	-12.9	-10.7	-6.6	-6.3
Oct. 1926	65.53	-.7	+.9	-.05	-.8	+.1	-1.3	-1.6	-2.0	-3.2	-4.5	-4.0	-2.5	-.05
Aug. 1929	69.50	-6.9	-4.9	-2.7	-1.3	+.4	-3.3	-8.3	-11.4	-17.6	-21.0	-24.6	-25.3	-28.2
May 1937	71.63	-12.9	-9.3	-5.8	-2.4	+.4	+.5	-6.0	-16.0	-20.2	-18.0	-12.8	-10.9	-9.8
Feb. 1945	115.43	+5.9	+2.9	+1.4	-.7	+.3	-2.8	-10.4	-22.8	-26.1	-16.0	-12.0	-9.9	-9.8
Nov. 1948	101.87	+1.9	+1.7	+.1	+1.0	+.3	-4.1	-8.5	-9.4	-11.2	-8.6	-4.2	+1.1	+3.3
July 1953	113.23	-10.8	-3.5	-1.0	+.5	+.3	-2.7	-6.8	-9.4	-11.9	-11.2	-9.9	-7.5	-6.2
July 1957	104.80	-1.9	+2.4	+2.0	+1.0	.0	-1.9	-6.5	-11.7	-11.2	-10.9			

APPENDIX C

13.1, 13.2

Factory Employment Index, Jerome (1889-1921); BLS (1917-1958)

Unit: 1914=100 (1889-1921); 1923=100 (1917-1920); 1947-49=100 (1919-1958)

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
May 1891	July 1890, 57.33	-1.3	+6	+1.5	+1.3	+1.0	+1.5	+1.7	+4.0	+5.2	+5.4	+7.3	+7.1	+7.6
June 1894	Jan. 1893, 61.40	-1.5	-18.1	-13.4	-14.8	-12.5	-13.8	-10.3	-6.5	-4.2	+2	-3.2	-4.9	-6.5
June 1897	Dec. 1895, 59.33	-3.2	-4.3	-3.1	-2.2	-1.2	+4.3	+4	+1.1	+1.8	+2.3	+4.5	+8.5	+13.3
Dec. 1900	June 1899, 67.10	+3.0	+3.9	+3.1	+2.4	+3.7	+4.5	+5.5	+8.0	+10.1	+12.5	+13.7	+16.7	+18.3
Aug. 1904	Sept. 1902, 78.37	+1.2	+4	-8	+1.1	-8	+3.4	+3.7	+7.8	+8.2	+9.4	+9.9	+12.8	+14.6
June 1908	May 1907, 92.47	+9	-1.7	-14.8	-20.5	-18.5	-11.0	-4.3	-7	+5	+4.1	+7.4	+6.2	+7.0
Jan. 1912	Jan. 1910, 99.63	-1.4	-5	+1	+4	-5	+1.1	+3	+3.6	+3.9	+1.7	+1.7	+2.4	+1.5
Dec. 1914	Jan. 1913, 103.13	-2.3	-6	-2.0	-3.9	-6.1	-5.4	-1.4	+1.4	+7.3	+11.4	+13.9	+15.4	+19.4
Mar. 1919	Aug. 1918, 127.07	-1.2	+2	-1.5	-4.9	-9.9	-6.7	-2.6	+2	+7	-2.1	-7.8	-22.9	-23.3
Mar. 1919	Aug 1918, 115.43	-3	-2.0	-3	-3.0	-10.9	-6.1	-2.1	-3.2	+0.5				
July 1921	Jan. 1920, 74.13	-6.4	-12.4	-29.8	-28.4	-30.4	-28.4	-27.3	-25.3	-21.0	-17.2	-11.6	-8.8	-8.3
July 1924	May 1923, 67.97	+0.5	-2.6	-3.6	-5.2	-13.2	-11.3	-7.2	-6.1	-5.7	-4.2	-2.7	-3.6	-4.4
Nov. 1927	Oct. 1926, 65.53	-4	-1.0	-1.7	-2.0	-3.9	-3.9	-3.6	-1.3	+9	+3.2	+4.7	+6.5	+2.5
Mar. 1933	Aug. 1929, 69.50	-35.4	-41.2	-40.4	-39.4	-42.4	-33.1	-23.3	-25.9	-19.7	-18.4	-24.9	-20.0	-16.1
June 1938	May 1937, 71.63	-0.4	-7	-10.9	-17.1	-21.0	-16.4	-11.1	-10.2	-9.5	-5.8	-1.7	-3.7	-4.0
Oct. 1945	Feb. 1945, 115.43	-3	+0.5	-1.5	-7.6	-23.2	-20.8	-16.7	-13.6	-11.0	-9.9	-9.8	-11.6	-10.5
Oct. 1949	Nov. 1948, 101.87	+7	-2.8	-6.7	-9.6	-11.4	-8.4	-6.7	-1.5	+3.3	+4.6	+5.6	+4.6	+3.2
Aug. 1954	July 1953, 113.23	-6	-4.4	-7.8	-10.3	-12.2	-10.4	-9.4	-6.7	-6.1	-4.4	-5.2	-5.4	-6.2
Apr. 1958	July 1957, 104.80	+1.0	0	-1.9	-6.5	-11.7	-11.2	-10.9						

MONTHLY CHANGES IN CYCLICAL INDICATORS

14.0, 14.1

Unemployment Rate, NIES (1929-1940); BLS (1944-1958) (inv.)

Unit: per cent

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Rate above (+) or below (-) standing at preceding peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
Aug. 1929	.58				+1.07	-.54	+1.31	+2.54	+2.81	+6.06	+10.20	+11.09	+11.72	+14.43	
May 1937	11.53	+3.14	+1.93	+1.71	+.46	-.30	-.39	+2.17	+6.35	+8.21	+7.65	+5.61	+5.90	+5.37	
Feb. 1945	1.10	+.11	+.31	+.07	-.10	+.02	-.05	+.37	+2.45	+2.96	+3.15	+2.53	+2.89	+2.45	
Nov. 1948	3.96	-.35	-.05	-.32	-.17	+.04	+.77	+2.26	+2.78	+2.73	+2.48	+1.72	+.52	+.30	
July 1953	2.03	+.05	+.33	+.29	+.13	.00	+.45	+2.21	+3.21	+3.03	+3.10	+2.31	+2.16	+1.42	
July 1957	4.23	+.20	-.25	-.01	-.22	-.06	+.47	+1.53	+3.28	+3.09	+2.85				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Rate above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
12	9	6	3	3	6		9	12	15	18	21	24		
Mar. 1933	Aug. 1929, .58	+19.20	+23.14	+24.27	+24.62	+24.78	+24.46	+20.90	+20.49	+16.23	+17.11	+20.93	+19.86	+16.96
June 1938	May 1937, 11.53	-.03	+.10	+4.38	+6.96	+8.47	+7.07	+4.83	+5.66	+4.76	+3.69	+3.66	+4.13	+3.43
Oct. 1945	Feb. 1945, 1.10	-.19	-.02	-.07	+.38	+2.23	+2.97	+2.83	+2.31	+2.90	+2.81	+2.79	+2.62	+2.24
Oct. 1949	Nov. 1948, 3.96	-.26	+.50	+1.22	+2.47	+3.83	+2.69	+1.88	+1.04	+.14	-.22	-.82	-.82	-.45
Aug. 1954	July 1953, 2.63	.00	+.91	+2.67	+3.34	+3.38	+2.72	+2.19	+1.65	+1.67	+1.56	+1.49	+1.73	+1.51
Apr. 1958	July 1957, 4.23	-.22	-.06	+.47	+1.53	+3.28	+3.09	+2.85						

APPENDIX C

14.2, 14.3

Total Unemployment, NICE, (1929-1940); ELS (1944-1951), (1947-1958) (inv.)

Unit: thousand persons (1929-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
Aug. 1929	281.0			-190.8	+183.3	-92.9	+227.0	+441.6	+490.0	+1058.7	+1787.8	+1948.8	+2066.8	+2551.6
May 1937	6066.3	+26.2	+16.0	+14.3	+3.8	-2.6	-3.2	+19.4	+56.2	+72.9	+66.4	+50.9	+53.9	+49.7
Feb. 1945	586.7	+9.1	+33.0	+10.8	-8.0	+2.3	-2.8	+36.4	+222.2	+273.3	+314.2	+269.9	+300.6	+251.1
Nov. 1948	2156.0	-8.3	+1.2	-14.0	-5.2	+3.6	+24.5	+64.0	+90.1	+73.7	+81.0	+52.5	+28.8	+14.2
Nov. 1948	4366.7	-50.1	-45.4	-49.3	-46.4	-43.6	-33.2	-11.1	-4.3	-3.9	-7.1	-18.0	-35.7	-38.2
July 1953	3790.3	-45.9	-51.0	-50.4	-53.5	-55.9	-48.2	-17.8	-04	-4.9	-2.6	-15.2	-17.4	-29.8
July 1957	4983.7	-39.9	-46.0	-43.1	-45.5	-42.8	-35.9	-21.1	+3.8	+7	-2.7			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
Mar. 1933	Aug. 1929, 281.0	+3416.4	+4128.1	+4340.9	+4416.7	+4458.0	+4413.2	+3782.6	+3718.9	+2955.2	+3124.2	+3831.0	+3644.5	+3121.0	
June 1938	May 1937, 6066.3	-2	+1.2	+38.8	+61.7	+75.3	+63.5	+44.2	+52.0	+44.4	+35.2	+35.3	+39.8	+33.8	
Oct. 1945	Feb. 1945, 586.7	-14.8	-2.8	-4.5	+39.8	+201.7	+269.9	+278.4	+249.4	+302.3	+285.2	+292.0	+296.8	+246.5	
Oct. 1949	Nov. 1948, 2156.0	-8.2	+3.0	+37.2	+79.2	+107.3	+73.1	+59.8	+40.6	+12.5					
Oct. 1949	Nov. 1948, 2441.3	-6.9	+12.4	+31.0	+63.1	+98.5	+71.6	+51.4	+28.2	+6.3	-3.3	-19.3	-19.4	-9.1	
Aug. 1954	July 1953, 1662.0	-9	+36.0	+107.5	+132.0	+129.2	+107.6	+87.6	+68.0	+70.9	+68.7	+65.6	+78.2	+68.0	
Apr. 1958	July 1957, 2879.7	-5.6	-1.0	+11.0	+36.5	+79.6	+74.3	+68.3							

MONTHLY CHANGES IN CYCLICAL INDICATORS

15.0

Total Industrial Production Index (Including Utilities), FRB

Unit: 1947-49=100

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
Jan. 1920	41.7	-11.2	-16.0	-4.0	-6.4	+3.2	-4.0	-4.0	-8.8	-28.0	-30.4	-30.4	-23.2	-20.8
May 1923	47.7	-22.4	-20.3	-7.7	-5.6	+7	-3.5	-5.6	-3.5	-11.9	-14.0	-7.7	-1.4	-1.4
Oct. 1926	51.7	-7.1	-5.2	-3.2	-3.2	+6	-1.3	-1.3	-3.2	-5.2	-3.2	-3.2	+0	+6.4
Aug. 1929	59.7	-11.2	-6.1	-4.5	-1.1	+6	-6.1	-11.2	-14.5	-22.9	-27.9	-29.6	-27.9	-34.6
May 1937	63.7	-16.8	-12.0	-5.8	-2.6	+5	-1.0	-19.9	-29.3	-32.5	-23.0	-16.8	-15.2	-16.8
Feb. 1945	123.0	+4.1	.0	-.8	-1.6	.0	-4.9	-21.1	-28.5	-35.0	-31.7	-24.4	-21.1	-20.3
Nov. 1948	103.0	-1.0	.0	+1.0	+1.9	.0	-2.9	-5.8	-5.8	-5.8	-1.9	+6.8	+17.5	+16.5
July 1953	141.0	-15.6	-5.7	-2.8	-7	+7	-3.5	-8.5	-9.2	-8.5	-7.8	-2.8	+1.4	+4.3
July 1957	154.0	-7.1	-.6	.0	-.6	.0	-3.2	-9.7	-14.3	-7.8	-5.2			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
July 1921	Jan. 1920, 41.7	-4.0	-8.8	-28.0	-30.4	-30.4	-23.2	-20.8	-16.0	-6.4	+8	+5.6	+12.8	+12.8
July 1924	May 1923, 47.7	-1.4	-5.6	-5.6	-7.7	-16.1	-9.8	-1.4	-1.4	+7	+7	+2.8	+4.9	+4.9
Nov. 1927	Oct. 1926, 51.7	-1.3	-1.3	-1.3	-3.2	-7.1	-3.2	-1.3	+2.6	+8.4	+10.3	+14.2	+16.1	+8.4
Mar. 1933	Aug. 1929, 59.7	-44.7	-51.4	-48.0	-48.0	-51.4	-29.6	-31.3	-38.0	-29.6	-29.6	-38.0	-31.3	-24.6
June 1938	May 1937, 63.7	-1.0	-4.2	-26.2	-29.3	-30.9	-21.5	-15.2	-15.2	-13.6	-4.2	+3.7	-4.2	+2.1
Oct. 1945	Feb. 1945, 123.0	-1.6	.0	-2.4	-10.6	-30.9	-31.7	-29.3	-26.0	-22.0	-20.3	-20.3	-20.3	-18.7
Oct. 1949	Nov. 1948, 103.0	+1.0	-1.9	-4.8	-6.8	-8.7	-2.9	+3.9	+13.6	+17.5	+19.4	+20.4	+18.4	+17.5
Aug. 1954	July 1953, 141.0	.0	-6.4	-9.2	-8.5	-8.5	-6.4	-1.4	+2.8	+5.0	+7.1	+6.4	+6.4	+6.4
Apr. 1958	July 1957, 154.0	-.6	.0	-3.2	-9.7	-14.3	-7.8	-5.2						

APPENDIX C

15.1

Index of the Physical Volume of Business Activity, Babson

Unit: 1923-27=100 (1889-1938); 1947-49=100 (1936-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
July 1890	25.83	-4.4	-5.6	-1.7	-1.3	-9	+1.4	+2.2	-2.1	+8.8	+9.9	+9.2	+14.2	+11.1	
Jan. 1893	27.50	+2.5	+7.3	+4.4	+1.1	-1.1	+1.4	-8.4	-21.1	-17.8	-13.4	-13.4	-4.7	-1.4	
Dec. 1895	28.87	-7.5	-5.1	-5.4	+1.5	-1.6	-8.5	-9.6	-13.4	-8.2	-4.7	+1.2	+10.8	+13.6	
June 1899	35.33	-10.6	-10.0	-5.8	-2.4	+2	+4.2	+3.6	+3.6	+4.2	-5.5	+1.0	+8.7	+13.5	
Sept. 1902	42.43	-6.2	-9.0	-5.7	-5.0	-3	+5.8	+5.1	+7.9	+6.3	-7.4	+3.2	+2.3	+3.4	
May 1907	57.23	-10.7	-8.8	-7.9	-3.9	+1.7	-1.3	-13.7	-21.6	-26.6	-20.5	-12.8	-10.7	-9.0	
Jan. 1910	58.77	-14.2	-10.5	-5.2	-3	+2	-6	-4.2	-6.1	-6.6	-5.0	-5.4	-3.3	-1.0	
Jan. 1913	66.67	-12.7	-12.8	-7.6	-2.8	+1.5	-1.0	-2.4	-2.8	-9.6	-9.7	-8.8	-13.8	-15.6	
Aug. 1918	79.97	-1.0	+1.5	-4.6	+3.3	+3	-10.1	-13.2	-8.5	-1.2	-1.5	+13.8	+3.7	+2.9	
Jan. 1920	89.17	-17.9	-18.4	-10.4	-9.8	+3.1	-7.8	-7.7	-15.7	-27.9	-26.6	-25.9	-22.0	-22.6	
May 1923	101.10	-23.2	-19.5	-8.5	-7.0	-1	-5.5	-6.8	-1.9	-12.3	-13.7	-7.7	-4.0	-3.2	
Oct. 1926	108.40	-4.6	-3.8	-4.9	-1.8	-4	-3.7	-1.0	-3.7	-6.5	-4.5	-2.0	+2.9	+6.3	
Aug. 1929	120.40	-6.4	-5.2	-2.3	+6	+2	-11.5	-13.3	-14.5	-22.6	-28.0	-29.1	-25.2	-32.1	
May 1937	71.03	-11.9	-7.9	-5.8	-2.3	+1.2	-1.3	-18.2	-27.6	-28.6	-22.6	-12.0	-12.0	-12.7	
Feb. 1945	88.27	+5.0	+2.3	+1.3	+3	+6	+1.9	-7.2	-11.0	-15.3	-8.1	+13.1	+11.1	+12.8	
Nov. 1948	102.77	-6	-7	-1.0	+4.4	-3	-4.1	-5.1	+5	-8.6	-3.9	+10.4	+23.9	+12.2	
July 1953	123.57	-24.7	-4.4	-3.5	+6	+1.7	-3.5	-8.1	-6.3	-7.1	-8.6				

MONTHLY CHANGES IN CYCLICAL INDICATORS

15.1

Index of the Physical Volume of Business Activity, Babson

Unit: 1923-27=100 (1889-1938); 1947-49=100 (1936-1958)

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
May 1891	July 1890, 25.83	+3	+6	+6	-1.7	+6	+7.6	+11.1	+14.2	+14.2	+9.9	+7.2	+6.1	+8.0
June 1894	Jan. 1893, 27.50	-1.4	-19.3	-18.9	-13.8	-13.1	-5.1	-2.9	-4	-7	+6.5	+3.3	-4.0	-5.1
June 1897	Dec. 1895, 28.87	-9.6	-13.4	-8.2	-4.7	+1.2	+10.8	+13.6	+11.9	+9.5	+10.2	+15.4	+19.5	+22.6
Dec. 1900	June 1899, 35.33	+3.6	+3.6	+4.2	-5.5	+1.0	+8.7	+13.5	+12.6	+9.2	+13.2	+14.0	+19.7	+27.1
Aug. 1904	Sept. 1902, 42.43	+6.0	-6.0	+1.3	+4.9	-1	+10.3	+12.4	+21.1	+20.9	+21.6	+25.4	+20.4	+23.0
June 1908	May 1907, 57.23	-1.6	-6.2	-22.4	-23.5	-23.5	-17.4	-10.9	-8.4	-4.4	+1.5	+1.3	+5.4	+3.6
Jan. 1912	Jan. 1910, 58.77	-6.6	-5.0	-5.4	-3.3	-1.0	-1.1	+4.8	+10.3	+15.2	+12.3	+10.8	+10.3	+2.6
Dec. 1914	Jan. 1913, 66.67	-7.4	-4.6	-10.0	-10.8	-14.8	-9.1	-4.1	+2.3	+13.4	+13.1	+10.2	+10.6	+14.6
Mar. 1919	Aug. 1918, 79.97	+2	+0.4	-2.1	-8.1	-14.3	-6.8	+3	+5.8	+12.0	+3.9	-5	-10.3	-22.2
July 1921	Jan. 1920, 89.17	-7.7	-15.7	-27.9	-26.6	-25.9	-22.0	-22.6	-17.6	-8.5	-2.0	+6.0	+15.1	+10.2
July 1924	May 1923, 101.10	-2.8	-7.2	-4.5	-8.4	-15.9	-3.8	-2.7	-2.9	+2	+2.3	+3.2	+2.0	+5.3
Nov. 1927	Oct. 1926, 108.40	+2	-3.1	.0	-3.1	-9.1	-2.4	+3	+4.0	+5.3	+8.5	+11.7	+11.3	-1.8
Mar. 1933	Aug. 1929, 120.40	-43.3	-47.5	-45.6	-46.6	-51.0	-29.0	-37.1	-43.0	-32.1	-31.3	-41.8	-34.1	-30.0
June 1938	May 1937, 71.03	-1.7	-6.2	-22.0	-27.9	-29.2	-23.3	-12.9	-3.9	-8.8	-5.0	+1.2	-3.6	+1.2
Oct. 1945	Feb. 1945, 88.27	-4	-8	+1.5	-2	-14.0	-11.7	-7.2	+9.0	+10.9	+13.7	+12.5	+9.4	+15.8
Oct. 1949	Nov. 1948, 102.77	+4	-2.0	-3.9	-7.8	-14.9	+1.2	+5.5	+13.0	+17.5	+16.1	+16.6	+11.1	+9.3
Aug. 1954	July 1953, 123.57	-1.5	-6.0	-7.0	-6.2	-9.0	-4.3	+5.9						

APPENDIX C

15.2

Freight Carloadings, AAR

Unit: 1,000 cars per week

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
Aug. 1918	860.0			+9	+7.3	+5	-6.3	-8.6	-9.9	-6.6	-7.9	+2.1	+1.9	+2.3	
Jan. 1920	878.0	-9.7	-11.2	-7.3	-5.7	+4.8	-8.9	-9	-1.9	-10.5	-12.9	-16.3	-8.9	-12.3	
May 1923	988.3	-21.3	-18.4	-8.7	-6.1	+1	-1.0	-5.5	-1.0	-8.6	-7.9	-4.1	-1.2	-1.8	
Oct. 1926	1040.3	-6.7	-4.1	-3.2	-2	+4	-1.0	-3.0	-6.2	-6.8	-7.8	-6.8	-5.9	-3.1	
Aug. 1929	1030.3	-4.5	-1.0	-2.5	-4	+2	-5.8	-7.9	-11.9	-15.6	-21.6	-25.6	-28.0	-32.2	
May 1937	778.7	-12.7	-9.6	-4.4	-4.8	+1.6	-5.4	-18.3	-24.7	-28.0	-25.9	-21.5	-19.9	-22.9	
Feb. 1945	839.3	+3	-1.4	-3	-3	+1.5	-6	-8.7	-6.8	-4.3	-24.9	-4	-2.8	+4.5	
Nov. 1948	811.7	+6.2	+4.1	+5.0	+2.0	+5	-0.4	-7.4	-16.5	-18.8	-22.5	-11.7	-2.7	-2.9	
July 1953	756.0	-21.4	-1.8	+3	+9	-7	-5.2	-10.6	-15.9	-13.0	-14.2	-10.0	-7.0	-3	
July 1957	698.3	-14.2	+4.4	+1	-1.5	-1.2	-7.1	-15.5	-22.8	-20.8	-12.8				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
Mar. 1919	Aug. 1918, 860.0	+6.6	+6.7	-2.8	-4.8	-12.3	-8.7	-1.0	-2.8	+5.0	+1.0	-1	-2.8	-14.5
July 1921	Jan. 1920, 878.0	-9	-1.9	-10.5	-12.9	-16.3	-9.9	-12.3	-12.4	-8.0	-3.4	+5.5	+12.0	+12.2
July 1924	May 1923, 988.3	-3	-5.3	-6.0	-6.6	-9.2	-3.1	+2	-9	+4	-1.8	+1.0	+1.9	+5.0
Nov. 1927	Oct. 1926, 1040.3	+6	-1.4	-2.5	-4.9	-8.9	-5.5	-0.4	-5.4	-2.0	-3.4	-1.4	-8	-6.8
Mar. 1933	Aug. 1929, 1030.3	-43.6	-53.9	-48.6	-46.7	-53.5	-43.8	-42.4	-43.0	-39.4	-41.6	-43.9	-43.1	-40.2
June 1938	May 1937, 778.7	-2.9	-7.4	-22.3	-25.5	-28.8	-25.5	-19.5	-19.5	-18.8	-10.7	-10.2	-15.4	-10.0
Oct. 1945	Feb. 1945, 839.3	-0.4	-3.0	+1.6	-3	-14.0	-6.6	-21.6	+1.5	-1.1	+3.8	-1.0	-9	+2.0
Oct. 1949	Nov. 1948, 811.7	+1.6	-4.8	-4.1	-15.7	-35.1	-19.9	-10.6	-7.8	-2.0	-1.9	-1.9	-8.7	-4.3
Aug. 1954	July 1953, 756.0	-3	-8.5	-11.6	-12.6	-16.3	-12.2	-8.1	-1.3	-4.0	-1.4	-5	-5	-8.5
Apr. 1958	July 1957, 698.3	-1.5	-1.2	-7.1	-15.5	-22.8	-20.8	-12.8						

MONTHLY CHANGES IN CYCLICAL INDICATORS

16.0, 16.1

Gross National Product, in Current Dollars, Barger and Klein
(Q, 1923-1940); GBE (Q, 1944-1958)

Unit: billion dollars, annual rate

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
II 1923	82.8	-20.3	-17.3	-8.8	-6.5	.0	+2	-1.0	+2.8	+2.0	-2.3	+1	+7.5	+4.4	
III 1926	92.8	-5.0	+1.3	+3.2	.0	.0	+3.6	+1.1	+5	+1.4	+4	+6.8	-.3	+4.6	
III 1929	105.6	-8.0	-2.8	-1.3	-3.0	.0	-2.5	-5.6	-7.7	-12.3	-20.7	-23.6	-24.7	-28.9	
II 1937	92.5	-10.0	-8.4	-5.4	-5.5	.0	+5.1	-7.8	-11.8	-11.9	-9.2	-4.2	-5.5	-4.4	
I 1945	221.2	-7.0	-5.3	-3.2	-2.1	.0	+1.1	-4.1	-10.9	-10.5	-6.7	-1.8	.0	+2.2	
IV 1948	265.9	-7.8	-6.2	-3.1	-7	.0	-2.3	-3.6	-2.7	-3.3	-.04	+3.2	+10.3	+14.4	
II 1953	368.8	-7.4	-5.9	-2.8	-1.2	.0	-5	-2.1	-2.4	-2.7	-1.8	+5	+4.2	+6.6	
III 1957	447.8	-6.0	-4.0	-2.3	-1.2	.0	-1.2	-3.8	-3.0	-.8	+2.1				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
III 1924	II 1923, 82.8	+2	-1.0	+2.8	+2.0	-2.3	+1	+7.5	+4.4	+6.5	+13.5	+15.7	+12.1	+12.1	
IV 1927	III 1926, 92.8	+3.6	+1.1	+5	+1.4	+4	+6.8	-3	+4.6	+10.6	+12.3	+10.3	+13.8	+11.0	
I 1933	III 1929, 105.6	-38.5	-42.4	-49.1	-49.2	-49.6	-46.4	-43.9	-47.1	-40.9	-37.8	-36.4	-36.6	-35.8	
II 1938	II 1937, 92.5	.0	+5.1	-7.8	-11.8	-11.9	-9.2	-4.2	-5.5	-4.4	-1.3	+2.5	+5.6	+6.2	
IV 1945	I 1945, 221.2	-2.1	.0	+1.1	-4.1	-10.9	-10.5	-6.7	-1.8	.0	+2.2	+4.0	+6.5	+10.8	
IV 1949	IV 1948, 265.9	.0	-2.3	-3.6	-2.7	-3.3	-0.4	+3.2	+10.3	+14.4	+19.5	+22.8	+25.5	+27.2	
III 1954	II 1953, 368.8	-.5	-2.1	-2.4	-2.7	-1.8	+5	+4.2	+6.6	+9.4	+10.9	+11.3	+12.5	+14.2	
II 1958	III 1957, 447.8	-1.2	.0	-1.2	-3.8	-3.0	-.8	+2.1							

APPENDIX C

16.0, 16.1

Gross National Product, in Current Dollars, Barger and Klein
(Q, 1923-1940); OBE (Q, 1944-1958)

Unit: billion dollars, annual rate

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Billion dollars above (+) or below (-) standing at preceding peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
II 1923	82.8	-16.8	-14.3	-7.3	-5.4	.0	+2	-.8	+2.3	+1.7	-1.9	+1	+6.2	+3.6
III 1926	92.8	-4.6	+1.2	+3.0	.0	.0	+3.3	+1.0	+5	+1.3	+4	+6.3	-.3	+4.3
III 1929	105.6	-8.5	-3.0	-1.4	-3.2	.0	-2.6	-5.9	-8.1	-13.0	-21.9	-24.9	-26.1	-30.5
II 1937	92.5	-9.3	-7.8	-5.0	-5.1	.0	+4.7	-7.2	-10.9	-11.0	-8.5	-3.9	-5.1	-4.1
I 1945	221.2	-15.6	-11.8	-7.1	-4.7	.0	+2.5	-9.0	-24.1	-23.2	-14.9	-4.1	.0	+4.8
IV 1948	265.9	-20.8	-16.4	-8.2	-1.9	.0	-6.1	-9.5	-7.1	-8.9	-.1	+8.5	+27.3	+38.4
II 1953	368.8	-27.5	-21.8	-10.2	-4.3	.0	-1.7	-7.8	-8.8	-9.9	-6.8	+2.0	+15.5	+24.2
III 1957	447.8	-26.8	-17.8	-10.1	-5.4	.0	-5.5	-16.8	-13.3	-3.8	+9.3			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Billion dollars above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
III 1924	II 1923, 82.8	+2	-.8	+2.3	+1.7	-1.9	+1	+6.2	+3.6	+5.4	+11.2	+13.0	+10.0	+10.0	
IV 1927	III 1926, 92.8	+3.3	+1.0	+5	+1.3	+4	+6.3	-.3	+4.3	+9.8	+11.4	+9.6	+12.8	+10.2	
I 1933	III 1929, 105.6	-40.7	-44.8	-51.9	-52.0	-52.4	-49.0	-46.4	-49.7	-43.2	-39.9	-38.4	-38.6	-37.8	
II 1938	II 1937, 92.5	.0	+4.7	-7.2	-10.9	-11.0	-8.5	-3.9	-5.1	-4.1	-1.2	+2.3	+5.2	+5.7	
IV 1945	I 1945, 221.2	-4.7	.0	+2.5	-9.0	-24.1	-23.2	-14.9	-4.1	.0	+4.8	+8.8	+14.4	+23.9	
IV 1949	IV 1948, 265.9	.0	-6.1	-9.5	-7.1	-8.9	-.1	+8.5	+27.3	+38.4	+51.9	+60.5	+67.9	+72.2	
III 1954	II 1953, 368.8	-1.7	-7.8	-8.8	-9.9	-6.8	+2.0	+15.5	+24.2	+34.6	+40.1	+41.8	+46.2	+52.2	
II 1958	III 1957, 447.8	-5.4	.0	-5.5	-16.8	-13.3	-3.8	+9.3							

MONTHLY CHANGES IN CYCLICAL INDICATORS

17.0

Gross National Product, in Constant Dollars, OBE (Q, 1947-1958)

Unit: billion 1954 dollars, annual rate

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
IV 1948	297.3	-3.4	-3.7	-1.3	-.6	.0	-2.0	-2.4	-.6	-1.4	+1.8	+4.9	+9.5	+11.5	
II 1953	373.2	-6.4	-5.5	-2.9	-1.2	.0	-.8	-2.5	-3.4	-3.7	-3.0	-.8	+2.4	+4.4	
III 1957	410.6	-2.5	-1.2	-.5	-.1	.0	-1.7	-4.8	-4.3	-2.4	+.05				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
IV 1949	IV 1948, 297.3	.0	-2.0	-2.4	-.6	-1.4	+1.8	+4.9	+9.5	+11.5	+12.3	+14.4	+16.5	+16.7	
III 1954	II 1953, 373.2	-.8	-2.5	-3.4	-3.7	-3.0	-.8	+2.4	+4.4	+6.5	+7.5	+6.9	+6.9	+7.2	
II 1958	III 1957, 410.6	-.1	.0	-1.7	-4.8	-4.3	-2.4	+.05							

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Billion 1954 dollars above (+) or below (-) standing at preceding peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
IV 1948	297.3	-10.1	-10.9	-4.0	-1.7	.0	-5.8	-7.0	-1.7	-4.3	+5.4	+14.7	+28.3	+34.3	
II 1953	373.2	-23.9	-20.6	-10.9	-4.3	.0	-3.0	-9.3	-12.8	-13.7	-11.1	-3.1	+9.0	+16.3	
III 1957	410.6	-10.4	-5.1	-1.9	-.5	.0	-6.8	-19.6	-17.5	-9.7	+2				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Billion 1954 dollars above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
IV 1949	IV 1948, 297.3	.0	-5.8	-7.0	-1.7	-4.3	+5.4	+14.7	+28.3	+34.3	+36.7	+42.7	+49.0	+49.6
III 1954	II 1953, 373.2	-3.0	-9.3	-12.8	-13.7	-11.1	-3.1	+9.0	+16.3	+24.3	+27.9	+25.6	+25.7	+27.0
II 1958	III 1957, 410.6	-.5	.0	-6.8	-19.6	-17.5	-9.7	+.2						

APPENDIX C

18.0, 18.1

Bank Clearings Outside New York City, Commercial and Financial Chronicle (1881-1921);
Bank Debits Outside New York City, FRB, 140 Centers (1919-1947); 343 Centers (1944-1958)

Unit: million dollars, daily average (1881-1921); billion dollars (1919-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
Mar. 1882	38.733	-6.8	+17.7	+15.7	+11.0	-6	+2	+7.1	+5.8	+4.0	+6.1	+1.0	-17.4	-8.3	
Mar. 1887	48.077	-11.4	-10.4	-7.5	-2.9	+4.8	+10.4	+2.7	-2.2	-1.8	+4.4	+7.7	+8.2	+12.8	
July 1890	66.227	-12.7	-12.0	-7.2	-6.0	+1	+1.2	-5.8	-5.6	-3.9	-2	-6	+02	+4.2	
Jan. 1893	74.377	-11.4	-10.9	-7.2	-5.2	-3	-5.7	-21.2	-27.4	-21.0	-24.9	-25.0	-19.1	-16.3	
Dec. 1895	65.390	-7.7	-7.8	-1.4	-2.3	+8	-6.0	-2.6	-10.6	-3.9	-6.3	-2.1	+14.5	+12.5	
June 1899	91.313	-18.3	-19.0	-8.0	-8	-1	+4.2	+2.9	-2.4	+2.0	-4.1	+6.5	+9.1	+18.6	
Sept. 1902	116.567	-11.0	-7.0	-7.5	-7.3	+2.0	-1.0	-2.0	+5.1	+2.9	+1.0	-1.5	+1	+6.5	
May 1907	162.747	-10.1	-4.0	-6	+6	+2.6	+4.0	-17.7	-16.3	-15.1	-10.2	-5.5	-2.1	-7	
Jan. 1910	182.270	-13.7	-9.8	-6.0	-2.8	-1.1	+1.3	-8	-1.1	-4	-3.5	+1.3	+1.1	+4.5	
Jan. 1913	208.390	-8.6	-4.7	-3.9	+2.3	+7	-3.2	-9	+2.6	-3	-1.3	+7	-10.5	-9.5	
Aug. 1918	434.267	-20.2	-10.2	-10.6	-3.7	+1.1	-5	+3.8	+8.5	+16.2	+21.4	+30.8	+29.6	+26.8	
Jan. 1920	580.033	-20.6	-22.1	-12.1	-9.2	+7	+4.8	+2	-8.8	-25.0	-27.8	-29.4	-28.8		
Jan. 1920	20.17	-19.7	-22.6	-7.8	-5.3	+3.6	+1.6	+3.1	-2.3	-14.2	-20.2	-24.6	-21.6	-24.1	
May 1923	19.30	-14.5	-11.9	-9.8	-1.6	+1.6	-3.6	-2.1	+2.1	-2.6	.0	+1.6	+8.3	+6.7	
Oct. 1926	22.23	-2	+1.2	+3	+3.9	-1.0	+8	+5.2	+2.1	+4.4	+7.0	+12.4	+6.6	+15.1	
Aug. 1929	29.10	-12.7	-7.2	-5.5	-7.9	+5.8	+2.1	-16.8	-15.5	-22.0	-29.6	-34.0	-34.4	-38.5	
May 1937	19.80	-12.6	-8.1	-3.5	+1.0	-5	-1.0	-5.0	-16.2	-17.7	-14.1	-11.6	-14.6	-8.1	
Feb. 1945	39.40	+3.0	-6.8	-2.0	+4.6	-2.0	+5.1	-8	+1.8	+2.0	+9.9	+13.2	+17.0	+21.8	
Feb. 1945	44.53	+2.8	-7.3	-3.0	+4.0	-2.1	+4.0	-1.4	+4.0	+6.0	+11.4	+17.0	+21.5	+27.3	
Nov. 1948	66.83	-4.7	-4.7	-5.0	+5	+2	-5.6	-5.0	-7.5	-5.9	-1.5	+5.6	+15.5	+17.3	
July 1953	95.10	-8.7	-5.2	-3.2	-1.7	+1.2	-5	-3.3	-8	-5	+3	+6.0	+9.1	+12.6	
July 1957	123.13	-6.3	-4.5	-1.9	-1.2	-7	-1.1	-1.5	-2.7	-2.0	+4.1				

MONTHLY CHANGES IN CYCLICAL INDICATORS

18.0, 18.1

Bank Clearings Outside New York City, Commercial and Financial Chronicle (1881-1921);
Bank Debits Outside New York City, FRB, 140 Centers (1919-1947); 343 Centers (1944-1958)

Unit: million dollars, daily average (1881-1921); billion dollars (1919-1958)

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
May 1885	Mar. 1932, 38.733	-1.1	-11.7	-16.4	-18.2	-15.9	-8.7	+1.9	+5.9	-2.0	+13.2	+16.2	+17.4	+22.0	
Apr. 1888	Mar. 1837, 48.077	+6	-1.2	-3.2	-2.0	-1.7	+3.1	+14.9	+13.2	+8.3	+20.2	+21.3	+27.8	+29.5	
May 1891	July 1890, 66.227	+1	+1.5	-4.1	-6.3	-9.1	-1.6	-4.4	+7.7	-1.4	+11.3	+9.0	+13.2	+6.3	
June 1894	Jan. 1893, 74.377	-12.7	-26.8	-23.8	-22.7	-22.6	-20.6	-18.8	-19.0	-13.3	-14.1	-11.4	-17.4	-14.4	
June 1897	Dec. 1895, 65.390	-2.6	-10.6	-3.9	-6.3	-2.1	+14.5	+12.5	+8.8	+14.0	+13.2	+28.5	+38.6	+39.6	
Dec. 1900	June 1899, 91.313	+2.9	-2.4	+2.0	-4.1	+6.5	+9.1	+18.6	+13.6	+18.7	+18.1	+18.3	+30.2	+26.3	
Aug. 1904	Sept. 1902, 116.567	+1.2	-2.1	-5	-4.4	+4.6	+15.0	+10.4	+17.9	+22.0	+26.7	+29.8	+25.5	+34.0	
June 1908	May 1907, 162.747	-1.9	-1.0	-22.4	-15.8	-14.4	-5.4	-2.2	+8	+3.3	+10.3	+13.6	+17.9	+12.2	
Jan. 1912	Jan. 1910, 182.270	-4	-3.5	+1.3	+1.1	+4.5	+9.0	+9.9	+17.0	+15.1	+10.7	+13.3	+17.3	+14.0	
Dec. 1914	Jan. 1913, 208.390	-2	-1.6	-2.4	-8.1	-9.0	-3.7	-2.5	+4.5	+18.8	+29.5	+29.6	+38.7	+58.7	
Mar. 1919	Aug. 1918, 434.267	-7.2	-4.3	-4	+4.1	+3.1	+11.3	+25.3	+35.4	+44.0	+37.6	+36.9	+24.9	-1.6	
July 1921	Jan. 1920, 580.033	+2	-8.8	-25.0	-27.8	-29.4	-28.8								
July 1921	Jan. 1920, 20.17	+3.1	-2.3	-14.2	-20.2	-24.6	-21.6	-24.1	-21.2	-19.2	-13.7	-6.3	-5.8	-9.8	
July 1924	May 1923, 19.30	-5.7	-3.1	-3.1	-1.0	-3.1	+5	+9.8	+5.7	+10.9	+15.0	+16.6	+15.5	+19.7	
Nov. 1927	Oct. 1926, 22.23	+1.2	+5.2	+3.9	+7.5	+11.5	+10.2	+19.6	+14.2	+21.4	+23.7	+20.5	+88.5	+33.6	
Mar. 1933	Aug. 1929, 29.10	-54.3	-57.0	-57.7	-59.1	-61.8	-56.7	-56.4	-57.7	-54.0	-50.2	-53.3	-52.9	-48.4	
June 1938	May 1937, 19.80	-1.0	+5	-8.1	-16.2	-14.6	-12.1	-6.6	-11.6	-10.1	-3.5	-1.0	-5.0	-9.6	
Oct. 1945	Feb. 1945, 39.40	-3.8	+2	-3.0	-1.8	-2.0	+1.5	+9.1	+14.2	+14.2	+18.8	+21.6	+24.9	+35.5	
Oct. 1945	Feb. 1945, 44.53	-5.0	+2	-4.8	-2.5	-1.0	+4.4	+10.2	+16.1	+17.9	+23.7	+25.5	+29.6	+40.6	
Oct. 1949	Nov. 1948, 66.83	-2	-2.7	-3.8	-6.0	-4.7	-2.1	+1.1	+9.2	+14.5	+23.4	+23.0	+21.2	+24.9	
Aug. 1954	July 1953, 95.10	+5	-8	-8	-2.1	+1.0	+3.2	+7.2	+10.9	+14.0	+15.5	+17.1	+20.9	+21.2	
Apr. 1958	July 1957, 123.13	-1.2	-7	-1.1	-1.5	-2.7	-2.0	+4.1							

APPENDIX C

19.0, 19.1

Personal Income, Barger and Klein (Q, 1922-1929); OEE (N, 1929-1958)

Unit: billion dollars, annual rate (1922-1929); billion dollars (1929-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
II 1923	67.50	-15.3	-10.5	-6.7	-4.3	.0	-2	+1.3	+2.2	-1.5	.0	+4.6	+0.4	+6.1
III 1926	76.40	-4.2	-1.0	-1.3	+3	.0	-2.2	-.8	+.4	-.1	+1.0	+1.2	+1.6	+3.9
Aug. 1929	87.17	.0	.0	-1.8	-2.1	+3	-3.9	-6.8	-8.8	-13.8	-17.8	-20.7	-21.5	-28.0
May 1937	75.93	-13.6	-9.0	-6.8	-4.5	-2	+6	-5.6	-9.5	-11.6	-9.6	-8.1	-6.5	-5.4
Feb. 1945	173.57	-5.5	-5.1	-4.4	-2.6	+1	-3	-1.6	-2.3	-2.0	+1.7	+6.3	+6.9	+8.8
Nov. 1948	214.03	-8.0	-6.0	-2.5	+6	+1	-2.4	-2.2	-3.1	-2.9	+2.4	+3.4	+9.0	+11.5
July 1953	289.93	-6.7	-3.2	-2.2	-.8	+0.5	+2	-.9	-1.0	-.6	+.5	+2.3	+5.2	+7.9
July 1957	354.17	-6.2	-3.9	-3.2	-1.7	+0.4	-2	-.5	-.2	+2.0	+2.9			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
III 1924	II 1923, 67.50	-.2	+1.3	+2.2	-1.5	.0	+4.6	+6.4	+6.1	+8.4	+12.0	+11.7	+13.5	+13.2
IV 1927	III 1926, 76.40	-2.2	-.8	+.4	-.1	+.9	+1.2	+1.6	+3.9	+6.5	+11.2	+11.1	+13.2	+10.2
Mar. 1933	Aug. 1929, 87.17	-37.0	-43.6	-46.1	-48.1	-50.7	-44.5	-44.1	-41.7	-39.0	-37.9	-39.2	-37.7	-33.8
June 1938	May 1937, 75.93	+1.1	-1.8	-8.1	-9.8	-11.1	-9.1	-7.7	-5.6	-4.9	-2.4	+.4	+.2	+1.7
Dec. 1945	Feb. 1945, 173.57	-3.4	-.1	-.8	+.8	-3.9	-1.7	+.9	+5.5	+6.5	+8.8	+6.5	+8.5	+13.1
Oct. 1949	Nov. 1948, 214.03	+.4	-2.2	-1.9	-4.1	-4.2	+1.2	+2.9	+5.7	+10.6	+14.9	+18.3	+19.9	+23.1
Aug. 1954	July 1953, 289.93	-.2	-.2	-.7	-.9	-.2	+1.6	+2.8	+6.3	+8.0	+10.2	+11.2	+14.0	+16.0
Apr. 1958	July 1957, 354.17	-1.7	+0.4	-.2	-.5	-.2	+2.6	+2.9						

MONTHLY CHANGES IN CYCLICAL INDICATORS

20.0

Sales by Retail Stores, Census

Unit: million dollars

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
May 1937	3583.3	-10.9	-10.6	-5.5	-3.9	+1.1	+1.3	-6.6	-11.4	-15.2	-11.7	-8.4	-5.6	-3.7
Feb. 1945	6256.0	-11.7	-7.0	-5.1	-1.6	-.6	-.05	+3.4	+12.9	+23.0	+33.2	+46.5	+49.3	+53.0
Nov. 1948	11014.7	-4.3	-3.6	-3.3	+5	-.9	-1.5	-.5	-1.4	-.5	+2.7	+5.8	+17.7	+6.8
July 1953	14184.3	-4.7	-1.0	-1.3	-.4	+1.1	-1.9	-4.7	-.3	-.3	-1.7	+3.9	+6.7	+8.2
July 1957	16951.0	-6.4	-6.2	-3.9	-3.0	+5	-1.4	-1.4	-2.6	-1.4	-.1			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
June 1938	May 1937, 3583.3	-.8	+1.8	-9.2	-13.0	-14.1	-10.9	-6.7	-4.6	-3.4	-.2	+4.2	+4.8	+7.6
Oct. 1945	Feb. 1945, 6256.0	-2.8	-.8	-2.3	+5.1	+9.3	+20.2	+29.1	+38.7	+46.0	+49.7	+55.4	+59.0	+66.3
Oct. 1949	Nov. 1948, 11014.7	-.3	-2.9	+.4	-2.5	-1.0	+.5	+3.8	+17.9	+9.3	+23.6	+12.8	+11.6	+16.6
Aug. 1954	July 1953, 14184.3	-1.7	-1.4	-2.5	-2.0	-1.3	+.3	+3.1	+7.4	+9.4	+10.4	+7.2	+11.0	+13.5
Apr. 1958	July 1957, 16951.0	-3.0	+5	-1.4	-1.4	-2.6	-1.4	-.1						

APPENDIX C

20.1

Index of Department Store Sales, FRB

Unit: 1947-49=100

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
Jan. 1920	31.0	-25.8	-19.4	-9.7	-9.7	+3.2	+3.2	+9.7	.0	+3.2	.0	-3.2	-6.4	-6.4
May 1923	34.3	-12.6	-12.6	-9.7	-6.8	-1.0	+1.9	-1.0	+1.9	-1.0	-3.9	+1.9	+1.9	+1.9
Oct. 1926	37.0	+2.7	.0	-2.7	.0	.0	.0	-2.7	.0	.0	.0	-2.7	+2.7	.0
Aug. 1929	38.3	-3.5	-9	-9	-3.5	-9	-9	-3.5	-6.1	-8.7	-11.3	-11.3	-13.9	-19.1
May 1937	35.3	-9.4	-6.6	-3.8	-9	+1.9	-9	-6.6	-6.6	-12.3	-12.3	-6.6	-6.6	-3.8
Feb. 1945	68.3	-18.0	-7.8	-7.8	-2.0	-.5	-4.9	-.5	+8.3	+21.5	+28.8	+43.4	+36.1	+37.6
Nov. 1948	104.0	+1.0	-1.9	.0	+1.0	-1.9	-4.8	-2.9	-7.7	-4.8	-4.8	-1.9	+9.6	+1.0
July 1953	118.0	-5.9	+8	-.8	.0	+8	-1.7	-3.4	-.8	.0	+1.7	+6.8	+7.6	+11.0
July 1957	140.0	-4.3	-6.4	-5.7	-6.4	-1.4	-7.9	-7.1	-7.1	.0	-3.6			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
July 1921	Jan. 1920, 31.0	+9.7	.0	+3.2	.0	-3.2	-6.4	-6.4	-3.2	-3.2	.0	+3.2	+9.7	+9.7
July 1924	May 1923, 34.3	-1.0	+1.9	+1.9	-1.0	-1.0	-3.9	-1.0	+1.9	+1.9	+10.7	+7.8	+4.8	+7.8
Nov. 1927	Oct. 1926, 37.0	.0	.0	-2.7	+2.7	.0	.0	.0	.0	+2.7	+2.7	.0	+2.7	+2.7
Mar. 1933	Aug. 1929, 38.3	-32.2	-37.4	-37.4	-42.6	-47.8	-37.4	-34.8	-34.8	-27.0	-32.2	-29.6	-27.0	-24.4
June 1938	May 1937, 35.3	-.9	-.9	-6.6	-6.6	-12.3	-9.4	-6.6	-3.8	-3.8	-.9	+4.7	-.9	+4.7
Oct. 1945	Feb. 1945, 68.3	-4.9	-3.4	-7.8	+3.9	+6.8	+15.6	+25.9	+31.7	+31.7	+36.1	+39.0	+40.5	+44.9
Oct. 1949	Nov. 1948, 104.0	+3.8	-1.9	-2.9	-8.7	-5.8	-5.8	-1.9	+19.2	+1.0	+21.2	+4.8	+4.8	+7.7
Aug. 1954	July 1953, 118.0	-1.7	.0	-.8	-2.5	+8	+1.7	+3.4	+6.8	+7.6	+9.3	+10.2	+13.6	+16.9
Apr. 1958	July 1957, 140.0	-6.4	-1.4	-7.9	-7.1	-7.1	.0	-3.6						

MONTHLY CHANGES IN CYCLICAL INDICATORS

21.0

Wholesale Price Index, Excluding Farm Products and Foods, EIS

Unit: 1926=100 (1913-1929); 1947-49=100 (1926-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
12	9	6	3	3	6		9	12	15	18	21	24		
Jan. 1913	71.60					+3	-2.0	-2.7	-2.7	-6.4	-6.4	-7.8	-8.1	-9.9
Aug. 1918	126.67	-4.3	-9.7	-11.2	-2.7	-3	+3.7	-3.1	-6.3	+4.8	+11.9	+28.0	+34.5	+33.9
Jan. 1920	154.70	-19.1	-23.5	-17.5	-11.1	+3	+9.9	+10.5	+9	-18.7	-29.8	-36.5	-36.3	-36.1
May 1923	107.33	-5.6	-1.8	-2.1	+1.1	-3	-5.2	-6.7	-5.0	-6.8	-8.7	-7.5	-4.5	-4.9
Oct. 1926	99.27	+3.9	+3.0	+1.4	+4	+1	-3.0	-5.0	-5.7	-6.2	-6.6	-6.1	-6.4	-6.9
Oct. 1926	71.00		+3.0	+1.4	+4	+1	-3.0	-5.1	-5.8	-6.2	-6.6	-6.2	-6.5	-6.9
Aug. 1929	65.40	+1.5	+1.2	+6	+3	-2	-1.2	-2.6	-4.3	-8.7	-12.1	-14.2	-17.3	-19.1
May 1937	61.70	-8.8	-7.8	-6.0	-2.8	.0	-2	-2.3	-3.7	-5.3	-5.5	-6.8	-6.8	-6.6
Feb. 1945	70.80	-1.1	-4	-4	-4	.0	+7	+8	+1.1	+2.1	+5.5	+12.7	+21.5	+29.7
Nov. 1948	104.93	-6.0	-3.7	-1.9	-0.3	+2	-1.6	-3.2	-4.3	-5.0	-4.8	-2.7	+1.3	+6.3
July 1953	114.77	-1.7	-1.5	-1.9	-1.3	+2	-1	-3	-2	-2	-3	+2	+8	+1.9
July 1957	125.97	-3.2	-2.0	-9	-4	+1	-2	-2	-4	+0.3	+3			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
12	9	6	3	3	6		9	12	15	18	21	24			
Dec. 1914	Jan. 1913, 71.60	-4.9	-6.2	-7.7	-6.8	-9.1	-9.8	-7.4	-3.5	+6.0	+17.9	+20.0	+22.6	+46.2	
Mar. 1919	Aug. 1918, 126.67	-5.5	-2.1	+1.8	+2.1	-5.1	-3.0	+6.4	+15.9	+31.0	+34.0	+30.0	+6.7	-11.7	
July 1921	Jan. 1920, 154.70	+10.5	+9	-18.8	-29.8	-36.5	-36.3	-36.1	-36.9	-31.5	-32.3	-30.7	-29.2	-33.2	
July 1924	May 1923, 107.33	-3.7	-6.1	-4.8	-5.7	-9.0	-8.4	-5.8	-5.3	-3.0	-3.9	-4.8	-6.2	-7.1	
Nov. 1927	Oct. 1926, 99.27	-6	-3.8	-5.4	-5.6	-6.8	-6.4	-6.1	-6.4	-6.8	-7.3	-7.5	-7.9	-9.0	
Nov. 1927	Oct. 1926, 71.00	-6	-3.8	-5.5	-5.5	-6.8	-6.5	-6.2	-6.5	-6.8	-7.3	-7.6	-8.0	-9.0	
Mar. 1933	Aug. 1929, 65.40	-22.0	-22.6	-23.7	-24.8	-27.7	-24.2	17.3	-15.4	-13.9	-14.1	-14.7	-15.0	-15.3	
June 1938	May 1937, 61.70	.0	-5	-2.9	-4.4	-5.5	-5.8	-7.0	-6.8	-6.6	-4.9	-2.9	-3.7	-4.5	
Oct. 1945	Feb. 1945, 70.80	-3	-1	+3	+8	+1.1	+1.3	+4.2	+11.0	+17.1	+28.4	+32.9	+34.6	+38.3	
Oct. 1949	Nov. 1948, 104.93	+2	-1.2	-2.6	-4.0	-4.9	-5.3	-3.8	-3	+4.8	+10.2	+11.7	+10.9	+9.2	
Aug. 1954	July 1953, 114.77	+1	-2	-4	-1	-3	-1	+6	+8	+2.4	+3.9	+4.9	+6.2	+6.8	
Apr. 1958	July 1957, 125.97	-4	+1	-2	-2	-4	+0.3	+3							

APPENDIX C

22.0

Plant and Equipment Expenditures, Total, GBE-SEC (Q)

Unit: billion dollars, annual rate

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
IV 1948	22.26	-4.2	+4	-2.1	-1.4	.0	-5.3	-11.6	-15.3	-20.0	-17.3	-13.6	-5.5	+4.7	
II 1953	28.10	-5.4	-8.7	-4.9	-9	.0	+2.6	+1.5	-2.3	-4.2	-4.5	-6.8	-8.7	-3.2	
III 1957	37.75	-5.0	-3.4	-2.3	-1.9	.0	-4.0	-14.1	-19.7	-21.6	-20.6				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
IV 1949	IV 1948, 22.26	.0	-5.3	-11.6	-15.3	-20.0	-17.3	-13.6	-5.5	+4.7	+6.6	+14.4	+19.0	+19.3	
III 1954	II 1953, 28.10	+2.6	+1.5	-2.3	-4.2	-4.5	-6.8	-8.7	-3.2	+5.5	+11.9	+16.8	+22.7	+27.7	
II 1958	III 1957, 37.75	-1.9	.0	-4.0	-14.1	-19.7	-21.6	-20.6							

22.1

Plant and Equipment Expenditures, Manufacturing, Chawner (Q)

Unit: million dollars

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
III 1918	684	-32.7	-30.0	-19.0	-1.9	.0	-18.6	-29.2	-37.3	-17.3	+8.9	+27.3	+30.1	+13.6
I 1920	871	-44.4	-50.7	-35.0	-14.5	.0	+2.2	-10.8	-28.0	-49.1	-59.7	-65.7	-68.5	-64.4
II 1923	556	-38.1	-26.8	-13.5	-11.0	.0	-5.8	-14.6	-14.0	-19.6	-30.2	-24.8	-15.3	-14.2
III 1926	575	-15.8	-6.6	+1.0	+3.1	.0	+4.5	-2.4	-7.0	-11.8	-12.2	-8.9	-3.1	+4.5
III 1929	682	-11.9	-8.5	-3.4	+4.5	.0	+4	-12.0	-26.7	-36.2	-45.3	-54.3	-57.2	-65.1
II 1937	553	-31.6	-29.5	-20.3	-9.2	.0	+2.7	-2.9	-29.1	-40.3	-41.0			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
12	9	6	3	3	6		9	12	15	18	21	24		
I 1919	III 1918, 684	-19.0	-1.9	.0	-18.6	-29.2	-37.3	-17.3	+8.9	+27.3	+30.1	+13.6	-8.3	-35.2
III 1921	I 1920, 871	-10.8	-28.0	-49.1	-59.7	-65.7	-68.5	-64.4	-60.5	-53.3	-44.8	-43.2	-36.2	-39.8
III 1924	II 1923, 556	-5.8	-14.6	-14.0	-19.6	-30.2	-24.8	-15.3	-14.2	-13.0	-3.4	+4.5	+6.7	+3.4
IV 1927	III 1926, 575	+4.5	-2.4	-7.0	-11.8	-12.2	-8.9	-3.1	+4.5	+8.5	+14.6	+24.0	+18.6	+19.1
I 1933	III 1929, 682	-73.0	-78.6	-82.4	-81.8	-82.8	-78.7	-67.3	-66.0	-67.2	-62.8	-65.7	-65.1	-62.8
II 1938	II 1937, 553	.0	+2.7	-2.9	-29.1	-40.3	-41.0	-37.6						

MONTHLY CHANGES IN CYCLICAL INDICATORS

23.0

Wage and Salary Cost per Unit of Output, Manufacturing

Unit: million dollars per index point

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
Nov. 1948	38.10	-5.0	-4.5	-2.4	.0	+3	.0	+3	-2.6	-5.0	-5.0	-5.8	-7.6	-1.8
July 1953	41.73	-1.5	-1.5	-.6	+.4	-.8	+2.1	+4.7	+3.5	+1.4	+.9	-1.0	-1.0	-1.3
July 1957	44.33	+.4	-1.2	-.8	+.4	-.1	+2.4	+5.6	+7.8	+2.2	+.4			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
Oct. 1949	Nov. 1948, 38.10	-.5	.0	.0	-1.6	-4.2	-4.2	-6.0	-7.3	-2.4	-1.6	+2.1	+5.8	+6.8
Aug. 1954	July 1953, 41.73	+.2	+2.8	+4.2	+2.8	+.9	+2.3	-.3	-.8	-1.8	+1.1	+1.1	+3.0	+4.2
Apr. 1958	July 1957, 44.33	+.4	-.1	+2.4	+5.6	+7.8	+2.2	+.4						

APPENDIX C

23.1

Production Worker Wage Cost per Unit of Output, Manufacturing

Unit: 1947-49=100 (1919-1950); 1957=100 (1947-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
12	9	6	3	3	6		9	12	15	18	21	24		
Jan. 1920	89.7	-9.7	-13.0	-11.9	-5.2	+4	+6.0	+9.3	+11.5	-1.9	-1.9	-9.7	-18.6	-23.0
May 1923	71.0	-9.9	-1.4	-5.6	-2.8	.0	+1.4	+7.0	+4.2	+4.2	.0	-4.2	-4.2	-2.8
Oct. 1926	65.7	+2.0	+2.0	+2.0	+5	+5	-1.0	-1.0	-1.0	-1.0	-2.5	-2.5	-4.1	-5.6
Aug. 1929	60.0	+1.7	+1.7	+3.3	+1.7	.0	.0	.0	.0	-1.7	-1.7	-6.7	-6.7	-8.3
May 1937	53.7	-8.7	-8.7	-8.7	-5.0	-1.2	+2.5	+11.8	+8.1	+4.4	+6	-1.2	-1.2	+6
Feb. 1945	79.7	-2.1	-.8	-.8	+1.7	+4	-.8	+1.7	-.8	+5.4	+13.0	+14.2	+20.5	+19.2
Nov. 1948	103.0	-4.8	-2.9	-2.9	+1.0	.0	.0	-1.9	-3.9	-5.8	-4.8	-4.8	-5.8	-1.0
Nov. 1948	94.80	-3.6	-2.3	-2.0	+1.1	+4	-.4	-1.4	-3.6	-6.3	-5.2	-4.4	-5.3	-.7
July 1953	100.97	-2.3	-1.6	-1.0	-.1	-1.0	+8	-.2	-1.7	-3.2	-2.7	-5.0	-4.9	-4.1
July 1957	99.73	+1.0	+6	+5	+9	.0	+9	+2.1	+1.5	-1.7	-3.9			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
12	9	6	3	3	6		9	12	15	18	21	24		
July 1921	Jan. 1920, 89.7	+9.3	+11.5	-1.9	-1.9	-9.7	-18.6	-23.0	-29.7	-27.5	-25.3	-23.0	-21.9	-19.7
July 1924	May 1923, 71.0	+1.4	+8.4	+2.8	+2.8	+2.8	-2.8	-4.2	-5.6	-5.6	-5.6	-5.6	-5.6	-7.0
Nov. 1927	Oct. 1926, 65.7	+5	-1.0	-1.0	-1.0	-1.0	-4.1	-4.1	-7.1	-7.1	-5.6	-7.1	-8.6	-8.6
Mar. 1933	Aug. 1929, 60.0	-11.7	-16.7	-23.3	-25.0	-26.7	-35.0	-20.0	-16.7	-15.0	-11.7	-11.7	-11.7	-15.0
June 1938	May 1937, 53.7	+2.5	+4.4	+13.7	+6.2	+2.5	+6	-1.2	-1.2	-1.2	-5.0	-5.0	-1.2	-8.7
Oct. 1945	Feb. 1945, 79.7	+1.7	-.8	+4	+4	+4	+5.4	+6.7	+11.7	+18.0	+19.2	+21.8	+24.3	+25.5
Oct. 1949	Nov. 1948, 103.0	.0	.0	-1.0	-1.9	-4.8	-4.8	-6.8	-5.8	-1.9				
Oct. 1949	Nov. 1948, 94.80	-.3	-.2	-.8	-2.1	-5.5	-5.5	-6.1	-4.7	-2.5	.0	+3.2	+5.0	+4.4
Aug. 1954	July 1953, 100.97	+3	+1.3	+1	-2.6	-3.2	-2.5	-3.7	-3.8	-3.1	-2.1	-2.4	-1.7	-.2
Apr. 1958	July 1957, 99.73	+9	.0	+9	+2.1	+1.5	-1.7	-3.9						

MONTHLY CHANGES IN CYCLICAL INDICATORS

24.0

Manufacturers' Inventories, Book Value, Census-OMB (Q, 1926-1938); (M, 1944-1958)

Unit: million dollars, end of quarter (1926-1938); million dollars, end of month (1944-1958)

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Per cent above (+) or below (-) standing at peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
III 1926	12419			-.04	+2.3	.0	+0.4	-4.2	-3.5	-1.0	-2.7	+1.1	-1.9	-2.8	
III 1929	12681	-4.8	-3.7	-4.1	-3.6	.0	+0.7	+2.3	+1.0	-0.1	-11.2	-16.7	-21.3	-23.4	
II 1937	12168	-21.8	-19.0	-12.3	-7.7	.0	+5.0	-1.3	-4.9	-9.0	-11.5	-11.7			
Feb. 1945	19328.7	+4.4	+4.0	+3.3	+1.4	-.3	-.2	-2.9	-3.1	-2.2	+3.3	+14.4	+25.1	+33.6	
Nov. 1948	31623.3	-9.2	-7.8	-5.2	-2.0	+1	+1.4	-1.4	-5.7	-9.1	-8.2	-6.6	-4.7	+5.6	
July 1953	45649.3	-6.0	-5.1	-3.8	-2.4	-.2	+.4	-1.0	-3.5	-5.5	-5.8	-5.5	-5.3	-3.4	
July 1957	54049.7	-7.4	-4.2	-3.0	-.7	+1	+1	-2.1	-4.7	-7.9	-8.7				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Per cent above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
		12	9	6	3		3	6	9	12	15	18	21	24
IV 1927	III 1926, 12419	+4	-4.2	-3.5	-1.0	-2.7	+1.1	-1.9	-2.8	-1.7	-2.1	-1.5	+2.1	+2.9
I 1933	III 1929, 12681	-30.6	-32.9	-37.3	-42.2	-44.1	-46.3	-41.6	-35.8	-32.6	-28.9	-29.4	-31.3	-30.6
II 1938	II 1937, 12168	.0	+5.0	-1.3	-4.9	-9.0	-11.5	-11.7						
Oct. 1945	Feb. 1945, 19328.7	+2.8	+4	+5	-.6	-3.2	-5.8	+1.5	+10.5	+22.8	+30.8	+39.4	+43.8	+46.8
Oct. 1949	Nov. 1948, 31623.3	-.4	+9	-.4	-4.5	-8.2	-8.4	-7.4	-5.7	+1.0	+11.6	+20.7	+28.9	+33.8
Aug. 1954	July 1953, 45649.3	+9	+2	-1.7	-4.1	-6.1	-5.4	-5.5	-4.6	-1.9	+6	+4.2	+8.0	+10.4
Apr. 1958	July 1957, 54049.7	-.7	+1	+1	-2.1	-4.7	-7.9	-8.7						

APPENDIX C

25.0

Consumer Instalment Debt, FRB

Unit: million dollars, end of month

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN												
		Per cent above (+) or below (-) standing at peak												
		Months Before Peak				Peak Month	Months After Peak							
		12	9	6	3		3	6	9	12	15	18	21	24
Aug. 1929	3066.7	.0	.0	-13.4	-6.2	+3	+1.9	-2.5	-6.2	-9.4	-12.6	-15.9	-20.2	-24.2
May 1937	3906.3	-20.2	-15.3	-10.9	-4.7	-.1	+2.2	+2.6	-2.5	-6.0	-8.4	-8.3	-4.4	+4
Feb. 1945	2099.0	-4.4	-5.2	-2.9	-.9	-.7	-.7	+1.4	+9.3	+22.0	+39.4	+60.4	+83.8	+112.6
Nov. 1948	8652.7	-27.5	-19.1	-9.9	-4.6	-.1	+3.8	+11.2	+17.9	+27.8	+36.8	+46.6	+60.9	+66.3
July 1953	21745.3	-21.9	-17.1	-10.1	-3.6	+2	+2.4	+3.9	+4.2	+3.8	+4.1	+8.0	+14.3	+21.3
July 1957	32875.3	-7.9	-5.9	-3.8	-2.0	+.01	+1.7	+2.7	+1.6	+6	+7			

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN													
		Per cent above (+) or below (-) standing at preceding peak													
		Months Before Trough				Trough Month	Months After Trough								
		12	9	6	3		3	6	9	12	15	18	21	24	
Mar. 1933	Aug. 1929, 3066.7	-36.8	-41.6	-47.0	-50.6	-52.1	-53.5	-50.5	-49.5	-46.8	-44.6	-42.5	-40.2	-33.5	
June 1938	May 1937, 3906.3	+1.0	+3.0	+9	-3.9	-6.9	-8.9	-5.9	-2.5	+2.1	+6.3	+13.9	+19.0	+26.9	
Oct. 1945	Feb. 1945, 2099.0	-2.0	+5	-9	+1.2	+5.2	+18.0	+32.9	+52.0	+74.8	+103.8	+131.0	+161.0	+185.9	
Oct. 1949	Nov. 1948, 8652.7	-1.7	+2.6	+8.6	+15.1	+24.0	+33.8	+43.1	+56.3	+66.6	+68.0	+68.9	+65.4	+69.5	
Aug. 1954	July 1953, 21745.3	+9	+3.4	+4.3	+3.6	+3.6	+5.0	+9.8	+16.7	+23.9	+29.5	+34.4	+37.9	+40.5	
Apr. 1958	July 1957, 32875.3	-2.0	+.01	+1.7	+2.7	+1.6	+6	+7							

MONTHLY CHANGES IN CYCLICAL INDICATORS

26.0, 26.1

Bank Interest Rates on Customers' Loans, Riefler (1919-1939);
Bank Interest Rates on Business Loans, FRB (1944-1958)

Unit: per cent

Business Cycle Peak	Standing, Business Cycle Peak (3-month average, centered)	RECESSION PATTERN													
		Rate above (+) or below (-) standing at preceding peak													
		Months Before Peak				Peak Month	Months After Peak								
		12	9	6	3		3	6	9	12	15	18	21	24	
Jan. 1920	6.00	-.20	-.25	-.27	-.23	+.02	+.43	+.81	+.87	+.93	+.90	+.72	+.47	+.02	
May 1923	5.54	-.01	-.27	-.19	-.17	+.02	+.04	+.06	-.12	-.25	-.76	-.76	-.66	-.61	
Oct. 1926	5.15	-.07	-.06	-.03	-.24	+.04	-.07	-.15	-.19	-.25	-.26	-.13	+.41	+.61	
Aug. 1929	6.12	-.48	-.37	-.28	-.10	.00	-.04	-.46	-.95	-1.24	-1.39	-1.38	-1.52	-1.59	
May 1937	3.29	+.12	+.05	+.05	.00	+.03	-.04	+.02	-.09	-.07	-.16	-.11	-.11		
Feb. 1945	2.30	+.20	+.20	+.20	+.07	.00	.00	.00	-.20	-.23	-.27	-.30	-.23	-.20	
Nov. 1948	2.63	-.53	-.33	-.18	-.07	.00	+.05	+.10	+.04	+.01	-.01	+.02	+.02	+.14	
July 1953	3.73	-.23	-.23	-.21	-.13	.00	+.02	+.02	-.05	-.14	-.17	-.18	-.18	-.10	
July 1957	4.54	-.33	-.18	-.16	-.15	.00	+.30	+.19	-.16	-.36	-.23				

Business Cycle Trough	Date and Standing, Preceding Business Cycle Peak (3-month average, centered)	RECOVERY PATTERN												
		Rate above (+) or below (-) standing at preceding peak												
		Months Before Trough				Trough Month	Months After Trough							
12	9	6	3	3	6		9	12	15	18	21	24		
July 1921	Jan. 1920, 6.00	+.81	+.87	+.93	+.90	+.72	+.47	+.02	-.33	-.54	-.76	-.68	-.44	-.45
July 1924	May 1923, 5.54	+.01	+.07	+.02	-.18	-.59	-.66	-.74	-.57	-.59	-.46	-.45	-.42	-.63
Nov. 1927	Oct. 1926, 5.15	-.01	-.11	-.13	-.25	-.28	-.28	+.01	+.49	+.60	+.69	+.87	+.97	+.93
Mar. 1933	Aug. 1929, 6.12	-.98	-1.03	-1.17	-1.26	-.82	-1.26	-1.51	-1.67	-1.76	-1.90	-2.03	-2.14	-2.32
June 1938	May 1937, 3.29	-.06	-.04	-.03	-.07	-.04	-.12	-.04						
Oct. 1945	Feb. 1945, 2.30	+.13	.00	.00	.00	-.10	-.27	-.23	-.30	-.27	-.20	-.20	-.20	-.20
Oct. 1949	Nov. 1948, 2.63	-.02	+.03	+.08	+.07	+.01	.00	.00	+.03	+.07	+.27	+.41	+.44	+.50
Aug. 1954	July 1953, 3.73	+.01	+.02	.00	-.09	-.16	-.18	-.19	-.18	-.03	+.15	+.20	+.34	+.55
Apr. 1958	July 1957, 4.54	-.15	.00	+.30	+.19	-.16	-.36	-.23						

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Entries in boldface type refer to Volume II. Numbers in parentheses identify indicators and diffusion indexes for which data are given in Volume II. Pages on which the sources of the data and the figures appear are shown, in most instances, immediately after the series number.

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